

The Mutillidae (Wasps) of British Guiana<sup>1,2</sup>

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## INTRODUCTION

THE Department of Tropical Research of the New York Zoological Society, under the direction of Dr. William Beebe, made extensive and intensive collections of insects in a small area near its station at Kartabo, British Guiana, over a number of years. Some ten years ago their collections of Mutillidae were sent to the writer for determination with the request that a manuscript be prepared setting forth the results. Later when it was pointed out that a number of other collections of Mutillidae from British Guiana were available for study, permission was given to include this material and to make the report as comprehensive as possible. The additional material includes specimens from the Zoologisk Museum, Copenhagen, Denmark, labeled "Smidt," which were probably collected before 1800 and which Fabricius may have seen; collections made by Dr. O. W. Richards, London, England; Dr. F. X. Williams, entomologist for many years with the Hawaiian Sugar Planters Association; Mr. D. Vesey-Fitzgerald, formerly of the College of Tropical Agriculture, Trinidad, B. W. I., and specimens from numerous museums in Europe and North America.

The types of all the species involved were studied, redescribed and keyed during 1930-31 when the writer was a John Simon Guggenheim Memorial Fellow. Six new genera, twenty-nine new species and one new subspecies are described. Keys are presented to the genera occurring in British Guiana, and to the species recorded from that country as well as related species in some instances in order to facilitate identification. New synonymy has been included wherever relevant.

Numerous other species have been described

and remain to be described from Venezuela, Dutch Guiana (Surinam), French Guiana, Trinidad, B. W. I., and Brazil north of the Amazon River. Some of these will undoubtedly be ultimately recorded from British Guiana, so the present report cannot be regarded as complete.

## KEY TO THE GENERA

## FEMALES

1. Eyes strongly ovate with distinct facets; thorax rectangular, subrectangular or ovate, not conspicuously broader anteriorly than posteriorly ..... 2  
     Eyes circular to subovate, polished, the facets usually indistinct, thorax variously shaped but always conspicuously broader anteriorly than posteriorly.... 3
2. First abdominal segment completely sessile with the second; thorax rectangular ..... *Timulla* subgen. *Timulla* Ashmead  
     First abdominal segment cylindrical or subcylindrical, distinctly petiolate; thorax ovate ..... *Ephuta* Say
3. Antennae with 13 segments, the third segment about four times the length of the fourth; head armed with four dentiform or tuberculate processes, one pair on the genae and a second pair near the proboscideal fossa ..... *Hoplocrates* Mickel  
     Antennae with only 12 segments, the third segment not more than three times the length of the fourth ..... 4
4. Mandibles tomentose throughout  
     *Pappognatha* Mickel  
     Mandibles glabrous, sparsely pubescent proximally ..... 5
5. Pygidial area well defined, with distinct lateral boundaries, usually sculptured... 6  
     Pygidial area not defined, the posterior third to half of the last tergum glabrous 8
6. First abdominal segment completely sessile with the second. *Pseudomethoca* Ashmead  
     First abdominal segment disciform (i.e.,

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- with a distinct narrow dorsal face) or distinctly petiolate ..... 7
7. Second abdominal tergum with longitudinal rows of interrupted carinae, and with one pair of yellow or ferruginous integumental spots (rarely the integumental spots replaced with pubescent maculations) ..... *Hopломutilla* Ashmead
- Second abdominal tergum without rows of longitudinal carinae, usually with two pairs of yellow or ferruginous integumental spots (rarely with one pair) ..... *Traumatomutilla* André
8. Head large, subquadrate, the genal carina extending posteriorly on to the vertex; proboscidal fossa small, its width about equal to half the distance between the insertion of the mandibles; proboscidal fossa not connected with the genal carina by a transverse carina; lamellate process between and above hind coxae rounded at the tip; first abdominal segment completely sessile or subsessile with the second segment ..... 9
- Head not distinctly subquadrate, the genal carina not extending posteriorly on to the vertex; proboscidal fossa large, its width much greater than half the distance between the insertion of the mandibles; proboscidal fossa connected with the genal carina by a transverse carina; lamellate process between hind coxae acute at the tip; first abdominal segment either subnodose or disciform. 10
9. Mandibles slender, with a distinct, obtuse tooth within near the base; anterior margin of clypeus with a distinct tooth laterad of the insertion of the antennae ..... *Calomutilla*, n. gen.
- Proximal two-thirds of mandibles broad, then narrowed, forming a conspicuous tooth on the inner margin, the distal third attenuated and edentate; anterior margin of clypeus not dentate laterad ..... *Pertyella*, n. gen.
10. Mandibles tridentate distally, the distal and inner tooth large, the intermediate tooth small; inner margin of mandible with a distinct tooth intermediate between insertion and inner distal tooth; first abdominal segment nodose ..... *Lophomutilla*, n. gen.
- Mandibles edentate distally, slender, slightly broadened and angulate at the middle within, but the inner margin not dentate; first abdominal segment disciform ..... *Lophostigma*, n. gen.
2. First abdominal segment entirely sessile with the second; abdominal terga without, or only the last one with, a longitudinal median keel ..... *Timulla* subgen. *Timulla* Ashmead
- First abdominal segment cylindrical, not at all sessile with the second; third to seventh abdominal terga with a longitudinal median keel ..... *Ephuta* Say
3. Head armed beneath with four dentiform processes, one pair on the genae and one pair near the proboscidal fossa ..... *Hoplocrates* Mickel
- Head unarmed beneath ..... 4
4. First abdominal segment completely sessile with the second ..... 5
- First abdominal segment not sessile with the second, either disciform, or petiolate (6)
5. Last segment of tarsi with a lamellate process extending over and beyond the base of the claws ..... *Hopломutilla* Ashmead
- Last segment of tarsi not produced beyond the base of the claws ..... *Pseudomethoca* Ashmead
6. Mandibles tomentose throughout ..... *Pappognatha* Mickel
- Mandibles glabrous, clothed with sparse hairs ..... (7)
7. Scape bicarinate beneath ..... *Traumatomutilla* André
- Scape with a single carina beneath ..... 8
8. Proboscidal fossa not extending to base of mandibles; mandibles tridentate at tip; antennal tubercles widely separated ..... *Ancipitotilla*, n. gen.
- Proboscidal fossa large, extending laterad to insertion of mandibles; mandibles edentate at the tip; antennal tubercles almost contiguous. . . *Mammomutilla*, n. gen.

## GENUS TIMULLA Ashmead

## SUBGENUS TIMULLA Ashmead

## KEY TO THE FEMALES

1. Pygidium longitudinally striate ..... *rectangula* (Spinola)
- Pygidium not longitudinally striate, sculptured otherwise ..... 2
2. Head entirely ferruginous. . . *discontinua* Mickel
- Head entirely black ..... 3
3. Thorax entirely ferruginous. . . *valeria* Mickel
- Thorax maculated on the sides or above with black ..... 4
4. Dorsum of thorax entirely ferruginous; either the posterior face of propodeum or the meso- and metapleura maculated with black ..... 5
- Dorsum of thorax maculated with black. 6
5. Thorax broader posteriorly than anteriorly; pygidium unsculptured, glabrous on posterior half ..... *eriphyla* Mickel

## MALES

1. Eyes deeply emarginate on their inner margins ..... 2
- Eyes entire, not emarginate within ..... 3

Thorax not broader posteriorly than anteriorly; pygidium irregularly rugose with the posterior margin finely granulate ..... *mediata* (Fabricius)

6. Posterior marginal, pale pubescent band of second tergum complete

*mediata* var. *pexsa* Mickel

Posterior margin of second tergum black, without a pale pubescent band

*bitaeniata* (Spinola)

#### KEY TO THE MALES

1. Posterior margin of last tergum emarginate medially ..... 2

Posterior margin of last tergum not emarginate medially ..... 4

2. Proximal segments of flagellum yellowish beneath ..... 3

Flagellum entirely black. *bitaeniata* (Spinola)

3. Glabrous area of clypeus with the posterior margin evenly arcuate, the posterior half to two-thirds of the area almost flat, or evenly, shallowly concave; cell  $R_5$  slightly to distinctly less than three times as long as broad. *mediata* (Fabricius)

Glabrous area of clypeus with the posterior margin elevated and obtusely angulate medially, the posterior half to two-thirds of the area distinctly, transversely concave; cell  $R_5$  slightly to distinctly less than three times as long as broad ..... *obtusata* Mickel

4. Median, impunctate area of last tergum broadly emarginate posteriorly when viewed from above; posterior, inner angle of middle coxae with a small distinct tooth ..... *rectangula* (Spinola)

Median, impunctate area of last tergum not emarginate posteriorly when viewed from above; posterior inner angle of middle coxae toothed or not. .... 5

5. Abdomen entirely ferruginous; posterior, elevated margin of clypeus evenly arcuate or slightly subangulate medially, and slightly reflexed medially  
*rufogastra* (Lepeletier)

Last abdominal segment black, the first segment more or less black; clypeus elevated posteriorly, the posterior, elevated margin evenly arcuate ..... *valeria* Mickel

#### TIMULLA (TIMULLA) MEDIATA (Fabricius)

1805. *Dorylus mediatius* Fabricius, Syst. Piez., p. 428, male.

1805. *Mutilla lineola* Fabricius, Syst. Piez., p. 437, female.

1912. *Mutilla moorei* Cameron, Timehri; Journ. Roy. Agri. Com. Soc. British Guiana, (3), vol. 2, p. 413, male.

1912. *Mutilla longilineata* Cameron, Timehri; Journ. Roy. Agri. Com. Soc. British Guiana, (3), vol. 2, p. 414, female.

1938. *Timulla (Timulla) mediata* Mickel, Trans. R. Ent. Soc. London, vol. 87, p. 560, male and female.

*Specimens Examined*.—Male, Kartabo, Bartica district, British Guiana, June 15, 1924. Also previously recorded from the following localities in British Guiana: Blairmont, Georgetown and Kamakusa.

*Distribution*.—British Guiana, Colombia, Ecuador, Trinidad, B. W. I., Surinam, French Guiana and Brazil.

#### TIMULLA (TIMULLA) MEDIATA

var. *PEXSA* Mickel

1938. *Timulla (Timulla) mediata* var. *pexsa* Mickel, Trans. R. Ent. Soc. London, vol. 87, p. 563, male and female.

Previously recorded from: Blairmont, August, 1923 (H. E. Box).

*Distribution*.—Brazil, French Guiana and British Guiana.

#### TIMULLA (TIMULLA) OBTUSATA Mickel

1937. *Timulla (Timulla) obtusata* Mickel, Rev. Ent., Rio, vol. 7, pp. 169-171, male.

1938. *Timulla (Timulla) obtusata* Mickel, Trans. R. Ent. Soc. London, vol. 87, p. 563, male.

Not known from British Guiana, but may occur there as it is recorded from Surinam.

*Distribution*.—Surinam, French Guiana and Brazil.

#### TIMULLA (TIMULLA) BITAENIATA (Spinola)

1841. *Mutilla bitaeniata* Spinola, Ann. Soc. Ent. France, vol. 10, p. 91, female.

1938. *Timulla (Timulla) byblis* Mickel, Trans. R. Ent. Soc. London, vol. 87, p. 566, male. (New synonymy).

1938. *Timulla (Timulla) bitaeniata* Mickel, Trans. R. Ent. Soc. London, vol. 87, p. 595, female.

Not known from British Guiana but probably occurs there.

*Distribution*.—French Guiana, Surinam and Trinidad, B. W. I.

A male and female taken *in coitu* in Trinidad, B. W. I., show that *byblis* Mickel is the male of *bitaeniata* Spinola. The specimens are in the collection of the University of Minnesota.

#### TIMULLA (TIMULLA) RECTANGULA (Spinola)

1841. *Mutilla rectangulum* Spinola, Ann. Soc. Ent. Fr., vol. 10, p. 91, female.



1938. *Timulla (Timulla) rectangulum* Mickel, Trans. R. Ent. Soc. London, vol. 87, p. 584, female and male.

*Specimens Examined*.—Five females and five males, Kartabo, Bartica district, March 6, 1924; March 10, 1924; June 30, 1919; July 5, 1922; July 8, 1922; September 6, 1922; October 6, 1922; and without date.

Also previously recorded from the following localities in British Guiana: Blairmont and Essequibo river.

*Distribution*.—Colombia, Venezuela, British Guiana, Surinam, French Guiana and Trinidad, B. W. I.

- TIMULLA (TIMULLA) RUFOGASTRA (Lepeletier).  
1845. *Mutilla rufogastra* Lepeletier, Hist. Nat. Ins., Hymén., vol. 3, p. 629, male.

1938. *Timulla (Timulla) rufogastra* Mickel, Trans. R. Ent. Soc. London, vol. 87, p. 598, male.

Not recorded from British Guiana but probably occurs there.

*Distribution*.—French Guiana, Venezuela and Trinidad, B. W. I.

TIMULLA (TIMULLA) VALERIA Mickel

1938. *Timulla (Timulla) valeria* Mickel, Trans. R. Ent. Soc. London, vol. 87, p. 600, male.

1938. *Timulla (Timulla) herse* Mickel, Trans. R. Ent. Soc. London, vol. 87, p. 625, female, (New synonymy).

*Specimens Examined*.—Male and female (*in coitu*), Kartabo, Bartica district, May 12, 1924 [in collection of University of Minnesota]; two females, Kartabo, Bartica district, April 5, 1922, and September 26, 1922; female, Bartica, Bartica district; female, Tropical Research Station, No. 21115.

Also previously recorded from the following localities: Kamakusa, Tumatumari, Kerikabaru, and Essequibo river.

*Distribution*.—British Guiana, Surinam, French Guiana, Brazil, Venezuela, Colombia and Ecuador.

The above pair, taken *in coitu*, establishes *herse* Mickel as the opposite sex (female) of *valeria* Mickel (male).

TIMULLA (TIMULLA) DISCONTINUA Mickel

1938. *Timulla (Timulla) discontinua* Mickel, Trans. R. Ent. Soc. London, vol. 87, p. 594, female.

Not recorded from British Guiana, but probably occurs there.

*Distribution*.—French Guiana and Venezuela.

TIMULLA (TIMULLA) ERIPHYLE Mickel

1938. *Timulla (Timulla) eriphyla* Mickel, Trans. R. Ent. Soc. London, vol. 87, p. 591, female.

Not recorded from British Guiana, but probably occurs there.

*Distribution*.—French Guiana, Trinidad, B. W. I., Venezuela and Colombia.

Genus EPHUTA Say

KEY TO THE FEMALES

1. Second abdominal tergum with a deep fovea near each lateral margin. . . . . 2  
     Second abdominal tergum uniformly punctate near the lateral margins, without a deep fovea . . . . . 3
2. Lateral fovea small, inconspicuous, approximately one puncture in width and two punctures in length, not filled with dense pubescence; second tergum without a pair of anterior, pale pubescent spots . . . . . *erichtho*, n. sp.  
     Lateral fovea conspicuous, approximately six times longer than wide, filled with dense pubescence; second tergum with a pair of anterior, subtriangular, pale pubescent spots . . . . . *weberi*, n. sp.
3. Thorax with a very broad, transverse, elevated, glabrous scutellar scale  
     *aurulenta* (Fabricius)  
     Thorax without a scutellar scale. . . . . 4
4. Head entirely black . . . . . 5  
     Front ferruginous, vertex and genae black; thorax ferruginous, except the pronotum maculated with black. . . . . *roxane*, n. sp.
5. Thorax uniformly bright ferruginous  
     *egeria*, n. sp.  
     Thorax ferruginous, but the dorsum more or less maculated with black. . . . . 6
6. Lateral margins of dorsum of thorax, or the pronotum and propodeum, more or less infuscated, the infuscated spots not sharply defined . . . . . 7  
     Lateral margins of dorsum of thorax with distinct spots or lines of black, the maculations confluent medially on both the pronotum and the propodeum. . . . . 8
7. Propodeum with a pair of lateral, elongate, infuscated spots, sometimes very indistinct, almost absent . . . . . *copia*, n. sp.  
     Anterior two-thirds of dorsum and posterior face of propodeum infuscated  
     *elvina*, n. sp.
8. Abdominal terga three to five clothed throughout with pale golden pubescence . . . . . *limbata*, n. sp.  
     Abdominal terga three to five, each with a median, transverse, pale pubescent



spot, and with small lateral spots of fuscous to black pubescence...*hylonome*, n. sp.

KEY TO THE MALES

1. Second abdominal segment entirely black 2  
Second abdominal segment almost entirely ferruginous .....*rubrocincta*, n. sp.
2. Postero-lateral angles of dorsum of propodeum with a prominent tooth, or spine, or very prominently angulate..... 3  
Postero-lateral angles of dorsum of propodeum serrate or crenulate, but not toothed, nor spined, nor prominently angulate ..... 7
3. Tegulae transversely rugoso-punctate... 4  
Tegulae not transversely rugoso-punctate, usually with fine, separated punctures 6
4. Postero-lateral angles of scutellum produced into prominent teeth; dorsal half of mesopleura elevated into a prominent tooth .....*singularis* (Spinola) 5  
Postero-lateral angles of scutellum not at all produced; mesopleura evenly convex, the dorsal half not elevated into a tooth ..... 5
5. Anterior half of disc of second tergum strongly flattened and distinctly concave, closely punctate .....*perfica*, n. sp.  
Anterior half of disc of second tergum slightly flattened, but not at all concave, sparsely punctate .....*trifida* (Gerstaecker)
6. Posterior margin of scutellum distinctly emarginate medially; anterior half of disc of second tergum not conspicuously flattened .....*fugax* (Smith)  
Posterior margin of scutellum not at all emarginate; anterior half of disc of second tergum conspicuously flattened, slightly concave .....*richardsi*, n. sp.
7. Tegulae transversely rugoso-punctate  
*abadia* (Cresson)  
Tegulae not transversely rugoso-punctate, with fine, separated punctures..... 8
8. Scutellum elevated medially into a conspicuous subconical tubercle..... 9  
Scutellum flat or convex, not elevated medially into a subconical tubercle... 10
9. Second tergum evenly convex throughout; last sternum largely yellow...*subconica*, n. sp.  
Anterior half of disc of second tergum distinctly flattened; last sternum largely dark ferruginous .....*depressa*, n. sp.
10. Mandibles entirely yellow, except the tips castaneous ..... 12  
Mandibles sometimes yellow medially, usually dark ferruginous to black.... 11
11. Scutellum with a dorsal face and a posterior face almost perpendicular to the former, and with a median, shallow

emargination at the junction of the two faces .....*emarginata*, n. sp.

Scutellum evenly convex from anterior to posterior margins, without a posterior face and without a median emargination .....*infracta*, n. sp.

12. Hypopygium conspicuously yellow; sides of propodeum reticulate from anterior to posterior margin .....*indiscreta*, n. sp.

Hypopygium black or concolorous with other abdominal sterna; sides of propodeum glabrous, unsculptured on anterior half, reticulate on posterior half  
*flavidens*, n. sp.

EPHUTA RUBROCINCTA, new species

*Male*.—Holotype. Black, except the second abdominal segment red, and the anterior two-thirds of the last sternum pale yellow; scutellum convex; postero-lateral angles of dorsum of propodeum not dentate nor tuberculate, but the dorsum separated from the posterior face of propodeum by a strong, transverse carina elevated at the midline into a distinct tubercle; tegulae with sparse, fine punctures; disc of second tergum evenly convex. Length, 9 mm.

Head black, the distal half of the mandibles ferruginous with the tips dark; lateral areas of clypeus with long, subappressed, pale, silky pubescence; anterior half of front with thick, appressed, pale pubescence, the posterior half and area through ocelli with sparse, pale pubescence; vertex with the pale, appressed pubescence thin and with sparse, erect, pale hairs; genae with thick, appressed, pale pubescence and sparse, erect, pale hairs; mandibles edentate at the tip and with a small tooth within; clypeal carinae dilated posteriorly to form an incomplete circle, then for a short distance parallel, then each flaring laterally and continuous to the anterior margin; scape strongly bicarinate beneath; first and second flagellar segments approximately equal in length; antennal scrobes strongly carinate above; front, vertex and genae with moderate, contiguous to confluent punctures, those on the vertex more distinct than on the front, those on the genae almost concealed by the thick, pale pubescence.

Thorax entirely black; dorsum of pronotum clothed with thin, appressed, pale pubescence and sparse, erect, pale hairs; mesonotum with sparse, inconspicuous, fuscous hairs, except the postero-lateral angles with a tiny spot of dense, pale pubescence; scutellum with sparse, erect, pale hairs; dorsum and posterior face of propodeum with thin, subappressed, pale pubescence; lateral aspect of pronotum with sparse, pale pubescence; mesopleura with thick, appressed, pale pubescence, and sparse, erect, pale hairs;

metapleura with sparse, appressed, pale pubescence; sides of propodeum with sparse, appressed, pale pubescence and sparse, erect, pale hairs; dorsum of pronotum with moderate, dense, more or less confluent punctures; mesonotum with six more or less distinct, longitudinal rows of large, shallow, confluent punctures; scutellum evenly convex, with moderate, dense, somewhat confluent punctures; dorsum of propodeum separated from the almost perpendicular, posterior face of propodeum by a strong, transverse carina elevated medially into a distinct tubercle; postero-lateral angles of dorsum of propodeum not dentate nor tuberculate; dorsum and posterior face of propodeum reticulate, the former with a median, enclosed area almost its entire length; lateral aspect of pronotum glabrous, very indistinctly, shallowly punctate; mesopleura evenly convex, with moderate, contiguous punctures, somewhat concealed by the thick, pale pubescence; metapleura glabrous, somewhat punctate ventrally; sides of propodeum reticulate; tegulae convex, glabrous, finely punctate, the punctures sparse at the margins, clothed with sparse, fuscous pubescence, except the anterior and inner margins with the pubescence pale.

Abdomen black, except the second segment almost entirely red, only the posterior margin blackish, and the anterior two-thirds of the last sternum pale yellow; first segment distinctly broader than long; first tergum with moderate, contiguous punctures almost concealed by the thick, appressed, pale pubescence and sparse, erect, pale hairs; second tergum evenly convex, with moderate, contiguous, distinct punctures, the disc clothed with short, inconspicuous, ferruginous hairs, the lateral and anterior areas with sparse, erect, pale hairs, and the posterior margin with a band of dense, appressed, pale pubescence, slightly narrowed medially; terga three to six with small punctures and sparse, erect, pale hairs; last tergum with small, contiguous to confluent punctures and sparse, erect, pale hairs; first sternum with a median, longitudinal carina, not elevated anteriorly, and clothed with sparse, pale pubescence; second sternum with moderate, contiguous, distinct punctures, and with sparse, pale hairs, the lateral thirds of the posterior margin with a band of thick, appressed, pale pubescence; sterna three to six with small punctures, and sparse, erect, pale hairs; anterior two-thirds of last sternum with small, contiguous punctures and sparse, erect, pale hairs, the posterior third with sparse, fuscous hairs.

Wings subhyaline; cell 2nd  $R_1+R_2$  three times as long as wide, obliquely truncate at the tip; cell  $R_5$  receiving vein  $M_{3+4}$  two-thirds the dis-

tance from base to apex; cell  $R_1$  much less distinct than  $R_5$  and receiving vein  $M_2$  distinctly beyond the middle.

Legs black, clothed with sparse, pale pubescence; calcaria pale.

*Holotype*.—Male, Blairmont, British Guiana, September, 1923 (F. X. Williams), in collection of University of Minnesota.

*Paratypes*.—Male, Blairmont, British Guiana, October, 1923 (F. X. Williams); male, Blairmont, British Guiana, August 6, 1923 (H. E. Box); male, Blairmont, British Guiana, October 15, 1923 (H. E. Box); male, Essequibo, British Guiana (Smidt); male, Jabaty, Para, Brazil, May, 1924 (F. X. Williams); and male, Arapary, Para, Brazil, May, 1924 (F. X. Williams).

Easily distinguished from all other males of this genus in British Guiana by the red second abdominal segment.

#### EPHUTA SINGULARIS (Spinola)

1841. *Mutilla singularis* Spinola, Ann. Soc. Ent. France, vol. 10, p. 95, male.

1902. *Mutilla catinga* Cresson, Trans. Amer. Ent. Soc., vol. 28, p. 64, male. (New synonymy).

1937. *Ephuta singularis* Mickel, Rev. Ent., Rio, vol. 7, p. 175, female.

*Specimens Examined*.—Male, Bartica, British Guiana, February 18, 1913; male, Blairmont, British Guiana, September, 1923 (F. X. Williams).

*Distribution*. — British Guiana, Surinam, French Guiana, Para, Brazil and Santarem, Brazil.

#### EPHUTA PERFICA, new species

*Male*.—*Holotype*. Entirely black, except the last sternum yellow; scutellum evenly convex and densely punctate; dorsum of propodeum with a low, blunt, longitudinally compressed tooth at the postero-lateral angles and a median, small, longitudinally compressed acute tooth at the tip of the enclosed area; tegulae transversely rugoso-punctate and with a distinct, median, longitudinal ridge; disc of second tergum depressed, distinctly concave. Length, 10 mm.

Head black; front anterior to emargination of eyes, vertex posterior to lateral ocelli and genae, clothed with thick, appressed, pale, glittering pubescence, and sparse, erect, pale hairs; remainder of front and vertex with very sparse, appressed, pale, glittering pubescence and sparse, erect, black hairs; distal half of mandibles yellow, the tips reddish; mandibles edentate at the tip and with a distinct tooth within, clothed with pale hairs throughout, thick proximally, sparse at the tip; clypeus with a pair of parallel, median carinae on the posterior half, the ante-



rior half depressed, and the broad, anterior margin thin and translucent, clothed throughout with thick, long, subappressed, pale, silky hairs; antennal scrobes distinctly carinate above; scape strongly bicarinate beneath; first and second segments of flagellum approximately equal in length; front, vertex and genae with moderate, close, distinct punctures visible through the thick pubescence as well as elsewhere; genae elevated into a very high carina at the articulation of the mandible, the carina extending caudad a distance equal to half the length of the mandible; ventral aspect of head between the carinae and surrounding the proboscis glabrous, impunctate.

Thorax entirely black; posterior margin of pronotum, mesonotum entirely, and scutellum with sparse, erect, black hairs, the pronotum also with sparse, appressed, pale pubescence and scattered, erect, pale hairs, the scutellum also with sparse, short, inconspicuous, pale, erect, hairs, and long, erect, pale hairs at the lateral and posterior margins, remainder of thorax clothed with pale pubescence, thick and appressed on the elevated area of mesopleura, thick and irregularly semi-erect on the propodeum, thin and appressed elsewhere; pronotum with large, close, contiguous punctures, the latter almost obsolete at the midline; mesonotum with longitudinal rows of large, contiguous to confluent punctures; scutellum evenly convex, with moderate, contiguous, deep punctures; dorsum of propodeum with a narrow, median, enclosed area four times as long as broad and terminating at a distinct, longitudinally, compressed, acute tooth; postero-lateral angles of propodeum with a low, blunt, longitudinally compressed tooth, the elevation longer than high; surface of dorsum, posterior face, and sides of propodeum otherwise reticulate; lateral aspect of pronotum coarsely punctate at the upper margin, otherwise glabrous, impunctate; mesopleura with moderate, deep, contiguous punctures throughout, evenly convex throughout, not elevated anywhere into a tubercle or tooth; metapleura with a small area of moderate, contiguous punctures at the ventral margin, otherwise impunctate; tegulae large, with a distinct, median, longitudinal ridge, finely, transversely, rugoso-punctate throughout and clothed with short, sparse, black hairs.

Abdomen black, except the last sternum almost entirely pale yellow, only the posterior margin of this sternum fuscous to black; first tergum entirely, small antero-lateral and postero-lateral areas of second tergum, anterior half of second sternum, and posterior margin of second sternum broadly interrupted medially, all with thick, appressed, pale, glittering pubes-

cence; posterior margin of second tergum with a thin fringe of pale, glittering hairs, very narrowly and inconspicuously interrupted medially with a very few black hairs; remainder of abdomen clothed with very sparse, semi-erect and erect, pale hairs, except the posterior half of the disc of the second tergum and the median area of terga three to five with sparse, inconspicuous, black hairs; first abdominal segment viewed from above approximately as broad as long; first tergum with moderate, distinct punctures visible through the thick pubescence; anterior three-fourths of disc of second tergum strongly depressed, concave; second tergum with moderate, deep, distinct, contiguous punctures throughout; felt lines of second tergum absent; terga three to six with small, shallow, separated punctures; last tergum with small, shallow, close punctures; first sternum with a distinct but not prominent, median, longitudinal carina slightly elevated anteriorly, and with small, deep, distinct punctures; second sternum with moderate, distinct, contiguous to slightly separated punctures; sterna three to six with small, shallow punctures; last sternum with small, close, distinct punctures.

Wings subhyaline; cell 2nd  $R_1+R_2$  three and one-half times as long as wide, subacute at the tip; cell  $R_5$  receiving vein  $M_{3+4}$  at the middle; cell  $R_4$  receiving vein  $M_2$  at the middle.

Legs black, sparsely clothed with pale hairs; posterior coxae with a weak, longitudinal carina on the inner surface; calcaria white.

*Holotype*.—Male, Kamakusa, British Guiana (H. Lang), in collection of University of Minnesota.

*Paratypes*.—Male, Kartabo, Bartica district, British Guiana, March 29, 1924 (Wm. Beebe); male, Kartabo, British Guiana, July-August, 1920 (W. M. Wheeler); male, Bartica, British Guiana, February 4, 1913; three males, Moraballi Creek, Essequibo River, British Guiana, September 19, 1929, in Wallaba bush = *Iperna* sp. (O. W. Richards) [Oxford Univ. Expedition]; male, Moraballi Creek, Essequibo River, British Guiana, September 25, 1929, on trail (O. W. Richards); male, Paramaribo, Surinam (J. Michaelis); and two males, Mana River, French Guiana, May, 1917.

Related to *trifida* Gerstaecker, but differs from that species in the strongly concave second tergum, the prominently elevated carina on the genae at the articulation of the mandibles, the less prominent and blunt elevations at the postero-lateral angles of dorsum of propodeum and the entirely black last abdominal tergum. The paratypes vary in length from 9 mm to 12 mm.



EPHUTA TRIFIDA (Gerstaecker),  
(new combination)

1874. *Mutilla trifida* Gerstaecker, Arch. f. Naturg., vol. 40, p. 327, male.

*Specimens Examined*.—Four males, Kartabo, British Guiana, July-August, 1920 (W. M. Wheeler); male, Bartica, British Guiana, May 17, 1901; male, Demerara River, British Guiana, March 12, 1913; male, Kamakusa, British Guiana, January, 1923 (H. Lang); two males, Kamakusa, British Guiana (H. Lang); two males, Tukeit, British Guiana, July 17 and 18, 1911; two males, Oko River, British Guiana, June 26, 1936 (N. A. Weber); and six males, Moraballi Cr., Essequibo River, British Guiana, September, 1929 (O. W. Richards).

*Distribution*.—Venezuela, British Guiana and Para state, Brazil.

EPHUTA FUGAX (Smith), (new combination)

1879. *Mutilla fugax* Smith, Descr. New Species Hymen., p. 220, male.

1902. *Mutilla morada* Cresson, Trans. Amer. Ent. Soc., vol. 28, p. 63, male. (New synonymy).

*Specimens examined*.—Male, Bartica, Bartica district, British Guiana; two males, Moraballi Creek, Essequibo River, British Guiana; September 25, 1929, dark forest (O. W. Richards).

*Distribution*.—British Guiana, French Guiana, Brazil.

The type of *morada* has been compared with the above specimens which also answer to the original description, and to a description drawn by the writer from Smith's type of *fugax*; *morada* is undoubtedly a synonym.

EPHUTA RICHARDSI, new species

*Male*.—Holotype. Entirely black, except the anterior two-thirds of the last sternum yellow; scutellum convex; postero-lateral angles of dorsum of propodeum prominently spinose; posterior margin of dorsum of propodeum not dentate nor tuberculate medially; tegulae with fine sparse punctures throughout; disc of second tergum conspicuously flattened. Length. 10 mm.

Head black, clypeus clothed throughout with thick, long, subappressed, pale hairs; front anterior to emargination of eyes with thick, pale pubescence; remainder of front with sparse, pale pubescence and a few, scattered, black hairs posteriorly; transverse area through ocelli with sparse, erect, fuscous to black hairs; vertex with thin, appressed, pale pubescence and sparse, erect, pale hairs; genae with thick, appressed, pale pubescence and sparse, erect, pale hairs; distal half of mandibles castaneous, ex-

cept the tips blackish; mandibles edentate at the tip and with a small tooth within, clothed with pale pubescence; clypeal carinae subparallel, strongly elevated anteriorly; scape strongly bicarinate beneath; first and second segments of flagellum approximately equal in length; front, vertex and genae with moderate, dense, contiguous punctures; genal carina strongly elevated into a conspicuous tooth slightly posterior to the insertion of the mandibles.

Thorax entirely black; dorsum of pronotum with sparse, appressed, pale pubescence and sparse, erect, black hairs posteriorly; mesonotum with sparse, erect, black hairs throughout, except the postero-lateral angles with a small spot of dense, pale pubescence; scutellum with sparse, erect, black hairs on the disc, the narrow, lateral and posterior faces with thin, pale pubescence; dorsum and posterior face of propodeum with thick, subappressed, pale pubescence and sparse, erect, pale hairs; lateral aspect of pronotum with thin, appressed, pale pubescence; mesopleura with thin, appressed, pale pubescence and sparse, erect, pale hairs; metapleura with thin, appressed, pale pubescence; sides of propodeum with thick, subappressed, pale pubescence and sparse, erect, pale hairs like that on the dorsum of propodeum; tegulae with sparse, fuscous to black pubescence throughout; dorsum of pronotum with moderately large, dense, contiguous to confluent punctures; mesonotum with moderately large, more or less confluent punctures, not arranged in rows, and with a weak, median, longitudinal, glabrous line; scutellum convex, with moderate, more or less confluent punctures, and a weak, median, longitudinal, glabrous line on the anterior two-thirds; dorsum and posterior face of propodeum not separated, rounded into one another, the dorsum without a median tooth or tubercle at its posterior margin, but with a conspicuous, spinose process at each postero-lateral angle; dorsum and posterior face of propodeum reticulate; lateral aspect of pronotum glabrous, micropunctate, except dorsally punctate like the dorsum of pronotum; mesopleura evenly convex throughout and with moderately small, distinct, contiguous punctures; metapleura glabrous, micropunctate, except moderately punctate ventrally; anterior third of sides of propodeum glabrous, micropunctate, the remainder reticulate like the dorsum; tegulae evenly convex, with a median ridge on the anterior fourth, glabrous, sparsely, finely punctate throughout.

Abdomen black, except the anterior two-thirds of the last sternum yellow; first segment cylindrical, distinctly longer than broad; first

tergum with moderately small punctures almost concealed by the thick, appressed, pale pubescence and sparse, erect, pale hairs; anterior disc of second tergum distinctly flattened and slightly concave; second tergum with moderate, distinct, contiguous punctures, except at the anterior middle the punctures sparse, shallow and indistinct and at the posterior margin medially obsolete, the surface glabrous; second tergum clothed with sparse, black hairs, except a few, erect, pale hairs at the anterior middle, the lateral areas with thin, pale, appressed pubescence, the lateral margin with a narrow, thin fringe of pale pubescence, and the posterior margin with a band of pale pubescence, the latter broad at the sides, narrowed toward the middle and interrupted at the midline; third tergum without a median carina, glabrous, almost impunctate medially, with small, separated punctures towards the sides anteriorly, and clothed with sparse, black hairs, except laterally with sparse, pale hairs; fourth and fifth terga with sparse, small punctures, with sparse, black hairs medially, and sparse, pale hairs laterally; sixth tergum with sparse, small punctures and sparse, pale hairs; last tergum with small, distinct, slightly separated punctures and sparse, pale hairs; first sternum with a median, longitudinal carina distinctly elevated anteriorly, clothed throughout with thin, pale pubescence; second sternum with moderate, distinct, separated punctures and clothed throughout with thin, appressed, pale pubescence; sterna three to six with sparse, small punctures and sparse, pale hairs; last sternum with separated, small, indistinct punctures and sparse, erect, pale hairs.

Wings subhyaline; cell 2nd  $R_1+R_2$  approximately three times as long as wide, truncate at the tip; cell  $R_5$  receiving vein  $M_{3+4}$  distinctly beyond the middle; cell  $R_4$  much less distinct than  $R_5$  and receiving vein  $M_2$  distinctly beyond the middle.

Legs black, sparsely clothed with pale pubescence; calcaria pale.

*Holotype*.—Male, Moraballi Creek, Essequibo River, British Guiana, September 21, 1929 (O. W. Richards), in collection of University of Minnesota.

Related to *diacantha* Mickel from Brazil but lacks entirely the dense, pale pubescence on the anterior third of the second tergum and sternum, the pronotum is less thickly clothed with pale pubescence and the dorsum of the propodeum is not so densely pale pubescent.

*EPHUTA ABADIA* (Cresson), (new combination)  
1902. *Mutilla abadiah* Cresson, Trans. Amer. Ent. Soc., vol. 28, p. 64, male.

*Specimens Examined*.—Three males, Bartica, British Guiana, January 29, 1913; three males, Blairmont, British Guiana, September, 1923 (F. X. Williams); two males, Kamakusa, British Guiana.

*Distribution*.—Santarem, Brazil and British Guiana.

#### *EPHUTA SUBCONICA*, new species

*Male*.—Holotype. Entirely black, except the anterior three-fourths of the last sternum yellow; anterior half of scutellum with a median, longitudinal, elevated line, terminating in a conspicuous, subconical elevation at the middle; postero-lateral angles of dorsum of propodeum not spinose or tuberculate; dorsum of propodeum not dentate or tuberculate medially at the posterior margin; tegulae evenly convex, with fine, sparse punctures; disc of second abdominal tergum evenly convex, not at all depressed. Length, 8.5 mm.

Head black; lateral areas of clypeus clothed with thick, long, subappressed, pale, silky hairs, the median area very sparsely so; front clothed with thick, appressed, pale pubescence and sparse, erect, pale hairs; ocellar area with only sparse, erect, pale hairs; vertex with sparse, erect, pale hairs and thin, appressed, pale pubescence; genae with thick, appressed, pale pubescence and sparse, erect, pale hairs; mandibles dark castaneous on the proximal half and the tips, yellowish just distad of the middle, edentate at the tip and with a small tooth within; clothed with sparse, pale hairs; median carinae of clypeus subparallel; scape strongly bicarinate beneath; first and second segments of flagellum approximately equal in length; front, vertex and genae with moderate, contiguous punctures; carina separating anterior half of genae from proboscidal fossa not conspicuous, only moderately developed.

Thorax entirely black; dorsum of pronotum with thin, appressed, pale pubescence and sparse, erect, pale hairs; anterior and lateral margins of mesonotum with thin, appressed, pale pubescence, the postero-lateral angles with a small spot of dense, appressed, pale, pubescence; mesonotum otherwise with sparse, erect, pale fuscous to black hairs; lateral and posterior marginal areas of scutellum with sparse, erect, pale hairs, the median area with sparse, erect, fuscous to black hairs; dorsum and posterior face of propodeum with thick to dense, subappressed, pale pubescence; lateral aspect of pronotum with thin, subappressed, short, pale pubescence; mesopleura with thick, appressed, pale pubescence; metapleura and sides of propodeum with thin,



short, subappressed, pale pubescence; tegulae with sparse, suberect, pale fuscous to fuscous hairs, except the anterior and inner margins with pale pubescence; dorsum of pronotum with moderate, contiguous to confluent punctures; mesonotum with six longitudinal rows of moderately large, shallow, confluent punctures; scutellum with a median, longitudinal, glabrous, elevated line on the anterior half terminating at the middle of scutellum in a large, conspicuous, subconical tubercle, the remainder of scutellum with moderate, dense, confluent punctures; dorsum of propodeum rounded into the posterior face and not dentate nor tuberculate medially at the posterior margin; postero-lateral angles of dorsum of propodeum not spinose, dentate nor tuberculate; dorsum and posterior face of propodeum reticulate; lateral aspect of pronotum glabrous, micropunctate, except the dorsal margin punctate like the dorsum of pronotum; mesopleura evenly convex throughout and with moderate, contiguous punctures; metapleura glabrous and micropunctate, except a few contiguous punctures ventrally; sides of propodeum reticulate, tegulae large, convex, except a short, anterior, median carina glabrous, and with sparse, fine punctures.

Abdomen black, except the anterior three-fourths of the last sternum yellow; first abdominal segment cylindrical, about as broad as long when viewed from above; first tergum clothed with thick, appressed, pale pubescence and sparse, long, erect, pale hairs; second tergum evenly convex throughout, the disc not depressed, clothed with sparse, erect, pale hairs, and posteriorly with very inconspicuous, appressed, sparse, black hairs, the lateral margins narrowly with thick, short, pale pubescence and the posterior margin with a moderately broad band, somewhat narrowed medially, of thick, appressed pale pubescence; third to sixth terga with sparse, erect, pale hairs; last tergum with sparse, pale hairs; first tergum with moderate, distinct punctures more or less concealed by the pale pubescence; second tergum with moderate, distinct, contiguous, very deep punctures; third to sixth terga with small, shallow, separated punctures; last tergum with small, dense, contiguous to confluent punctures; first sternum with a distinct, median, longitudinal carina, not noticeably elevated anteriorly, and with sparse, pale pubescence; second sternum with moderate, distinct, contiguous punctures and sparse, erect and suberect pubescence throughout, the posterior margin with a fringe of pale pubescence, thin medially, but broadened and thickened towards the lateral margins; third to sixth sterna

with small, shallow punctures; last sternum with moderately small, contiguous punctures.

Wings subhyaline; cell 2nd  $R_1+R_2$  about two and one-half times as long as wide, truncate at the tip; cell  $R_5$  receiving vein  $M_{3+4}$  about three-fifths the distance from base to apex; cell  $R_4$  much less distinct than  $R_5$  and receiving vein  $M_2$  at the middle.

Legs black, sparsely clothed with pale hairs; posterior coxae without a longitudinal carina on the inner surface; calcaria pale.

*Holotype*.—Male, Flores, Manaos, Amazonas, Brazil, July 29, 1924 (J. Bequaert), in collection of University of Minnesota.

*Paratype*.—Male, Kartabo, British Guiana, July-August, 1920 (W. M. Wheeler).

Resembles *infracta* and *emarginata* but differs from both in the conspicuous, subconical tubercle on the scutellum and the absence of a median tubercle at the posterior margin of dorsum of propodeum.

#### EPHUTA DEPRESSA, new species

*Male*.—Holotype. Entirely black, except the anterior two-thirds of last sternum dark ferruginous; anterior third of scutellum with a median, longitudinal, elevated line terminating in a subconical tubercle just anterior to the middle of the scutellum; postero-lateral angles of dorsum of propodeum not spinose nor dentate; posterior margin of dorsum of propodeum not dentate nor tuberculate medially; tegulae with small, close, somewhat indistinct punctures on the disc, becoming sparse towards the margins; disc of second tergum distinctly flattened. Length, 8.5 mm.

Head black; lateral areas of clypeus clothed with thick, long, subappressed, pale, silky hairs, the median area very sparsely so; front anterior to emargination of eyes with thick, appressed, pale pubescence, the posterior area between emargination of eyes and anterior ocellus with sparse, erect, pale hairs; ocellar area with sparse, erect, pale hairs; genae with thick, appressed, pale pubescence and sparse, erect, pale hairs; mandibles castaneous, darker at the tip, edentate at the tip and with a small tooth within, and clothed with pale pubescence almost to the tip; clypeal carinae slightly diverging anteriorly; scape strongly bicarinate beneath; first segment of flagellum approximately equal in length to the second; front, vertex and genae with moderate, contiguous punctures; carinae separating anterior half of genae from proboscideal fossa distinct, but not high and conspicuous.

Thorax entirely black; dorsum of pronotum with thin, appressed, pale pubescence and sparse, erect, pale hairs; mesonotum with sparse,



erect, fuscous hairs, except the postero-lateral angles with a tiny spot of dense, appressed, pale pubescence; scutellum with sparse, long, erect, pale hairs, except the subconical elevation with sparse, black hairs; dorsum and posterior face of propodeum with thick to dense, short, subappressed, pale pubescence and sparse, erect, pale hairs; lateral aspect of pronotum with thin, short, appressed, pale pubescence; mesopleura with thick, short, appressed, pale pubescence and sparse, erect, pale hairs; metapleura and sides of propodeum with thin, appressed, pale pubescence; dorsum of pronotum with moderate, contiguous to confluent punctures; mesonotum with six longitudinal rows of moderately large, shallow, confluent punctures; anterior third of scutellum with a median, longitudinal glabrous line, rising abruptly and terminating in a subconical tubercle just anterior to the middle; scutellum otherwise with moderate, dense, contiguous punctures; postero-lateral angle of dorsum of propodeum not spinose or dentate, the lateral margins somewhat crenulate, the posterior margin without a median tubercle; dorsum and posterior face of propodeum reticulate; lateral aspect of pronotum glabrous and micropunctate, except the dorsal margin punctate like the dorsum of pronotum; mesopleura evenly convex throughout and with moderate, contiguous punctures; metapleura glabrous, micropunctate, except for a few moderately large punctures ventrally; sides of propodeum reticulate; tegulae convex, the disc with small, close, somewhat confluent punctures, becoming sparse towards the margins.

Abdomen black, except the anterior two-thirds of last sternum dark ferruginous; first abdominal segment cylindrical, slightly broader than long when viewed from above; first tergum clothed with thick, appressed, pale pubescence and sparse, long, erect, pale hairs; disc of second tergum with sparse, inconspicuous, pale hairs anteriorly, the hairs gradually changing to fuscous towards the middle and then to black posteriorly, the lateral areas of the tergum with sparse, erect, pale hairs, the lateral margins with a line of thin, appressed, pale pubescence, and the posterior margin with a band of thick, appressed, pale pubescence, broad at the sides and narrow medially; third to sixth terga with sparse, pale hairs and each with sparse, inconspicuous, black hairs submarginally posteriorly; last tergum with sparse, pale hairs and scattered, inconspicuous, black hairs; first tergum with moderate, separated punctures visible through the pale pubescence; second tergum with the anterior three-fourths of the disc distinctly flattened, the entire tergum with moderate, distinct, close,

deep punctures; third to sixth terga with small, sparse punctures; last tergum with small, close punctures; first sternum with a strong, median, longitudinal carina very slightly elevated anteriorly, the lateral areas distinctly punctate and clothed with sparse, pale pubescence; second sternum with a large, anterior area clothed with thin, appressed, pale pubescence extending from the proximal margin to distinctly beyond the middle on the midline, but only one-third the length of the sternum at the lateral margins; remainder of second sternum with sparse, pale, subappressed hairs, except the lateral thirds of the posterior margin with an indistinct band of thin, appressed, pale pubescence; second sternum with moderate, deep punctures throughout, the punctures separated anteriorly, close posteriorly; third to sixth sterna with small, sparse punctures and clothed with sparse, pale hairs; last sternum with small, close punctures and sparse, pale hairs.

Wings subhyaline; cell 2nd  $R_1 + R_2$  slightly more than three times as long as wide, truncate at the tip; cell  $R_5$  receiving vein  $M_{3+4}$  three-fifths the distance from base to apex; cell  $R_4$  less distinct than  $R_5$  and receiving vein  $M_2$  beyond the middle.

Legs blackish, sparsely clothed with pale pubescence; calcaria pale.

*Holotype*.—Male, Bartica, British Guiana, May 17, 1901, in collection of American Entomological Society, Philadelphia, Pa.

*Paratypes*.—Two males, Para, Brazil, March 6 and 8, 1902 (Ducke).

Related to *subconica* but differs in the smaller subconical tubercle of the scutellum, the distinctly depressed disc of the second tergum, the appressed pubescent area on the second sternum, and the largely ferruginous last sternum.

#### EPHUTA EMARGINATA, new species

*Male*.—*Holotype*. Entirely black, except the anterior two-thirds of the last sternum yellow; scutellum not evenly convex, with a dorsal, posterior and lateral faces; dorsal face of scutellum very large, flat, the posterior face short and almost perpendicular, the two separated by a weak, crenulate ridge interrupted medially by a shallow emargination; dorsum of propodeum separated from the sides of propodeum on the posterior half by a weak, crenulate ridge, the postero-lateral angles not dentate nor spinose, but with a distinct tubercle at the tip of the enclosed area; tegulae evenly convex, with small punctures, the latter somewhat close on the disc, but very sparse at the outer lateral and posterior margins; disc of second abdominal tergum evenly convex, not depressed. Length, 9 mm.

Head black; lateral areas of clypeus clothed with thick, long, subappressed, pale, silky hairs, the median area sparsely so; head clothed with appressed, and sparse, erect, pale hairs, the appressed pubescence thick to dense on the anterior half of front, the posterior half of vertex, and the genae, sparse on the posterior half of front and anterior half of vertex; a transverse area through the ocelli and between the compound eyes with the sparse, erect hairs fuscous; mandibles black on the proximal half to two-thirds, the distal third to half light brownish-yellow, with the tips castaneous; mandibles clothed with sparse, pale hairs, edentate at the tip and with a small tooth within; median carinae of clypeus subparallel anteriorly but roundly, slightly dilated on the posterior third and then joined in a subangulate loop at the posterior margin; dilated sector of each median carina with a carina extending laterad from it on to lateral areas of clypeus; antennal scrobes carinate above; scape strongly bicarinate beneath; first and second segments of flagellum approximately equal in length; front, vertex and genae with moderate, distinct, contiguous punctures; anterior half of genae separated from the proboscidal fossa by a high carina extending caudad from the articulation of the mandible.

Thorax entirely black; dorsum of pronotum clothed with moderately thick, appressed, pale pubescence and sparse, erect, pale hairs; anterior and lateral margins of mesonotum with thin, pale pubescence, the small postero-lateral angles with dense, pale pubescence; mesonotum otherwise with sparse, erect, fuscous hairs; scutellum with sparse, erect, pale hairs except the lateral and posterior faces with the erect hairs thicker than elsewhere, and the disc of the dorsal face with sparse, erect, fuscous hairs; dorsum of propodeum with thick, subappressed, pale pubescence; posterior face and sides of propodeum with thin, similar pubescence; pleural areas with thin, short, subappressed, pale pubescence and sparse, erect, pale hairs; pronotum with moderate, contiguous punctures visible through the pale pubescence; mesonotum with six longitudinal rows of large, shallow, contiguous to confluent punctures; scutellum with moderate, contiguous to confluent punctures on the dorsal face, the punctures somewhat deeper and smaller on the posterior face, and small on the lateral faces; dorsal and posterior faces of scutellum separated by a weak crenulate ridge, interrupted medially by a shallow emargination; dorsum of propodeum reticulate, with a median, enclosed space terminating posteriorly at the base of a conspicuous tubercle; dorsum and posterior faces of propodeum separated by a distinct, transverse ridge extending

laterad each side from the median tubercle; posterior face of propodeum reticulate; lateral aspect of pronotum micropunctate, except dorsally the punctation of the dorsal face extending somewhat onto the lateral aspect; mesopleura evenly convex throughout, and with moderate, contiguous to slightly separated punctures visible through the pubescence; metapleura glabrous, micropunctate, except ventrally with large, shallow, contiguous punctures; sides of propodeum reticulate throughout; tegulae large, glabrous, with small punctures, close on the disc and inner margins, sparse at the outer and posterior margins, clothed with sparse, fuscous pubescence, except the inner and anterior margins slightly pale pubescent.

Abdomen black, except the anterior two-thirds of the last sternum yellowish; first abdominal tergum broader than long, and with moderate, contiguous punctures on the dorsal face visible beneath the thick, appressed, pale pubescence and sparse, erect, pale hairs; second tergum evenly convex throughout, the disc not at all depressed; disc of second tergum with moderate, distinct, slightly separated punctures, the latter becoming smaller and closer toward the lateral and posterior margins; second tergum clothed with sparse, erect, fuscous hairs on the disc, and sparse, erect pale hairs elsewhere, except the lateral margins with a very narrow band of thin, appressed, pale pubescence and the posterior margin with a conspicuous, complete narrow band of thick, appressed pale pubescence, the band slightly broader laterally than at the middle; third to sixth terga with small distinct punctures and each clothed with sparse, erect, pale hairs, except a few, inconspicuous black hairs at the posterior margin of each; last tergum with small, close, distinct punctures and sparse, erect, pale hairs; first sternum with a distinct, median, longitudinal carina, only slightly elevated anteriorly, the sternum clothed with sparse, pale hairs; second sternum with moderate, close to contiguous punctures and sparse, erect, pale hairs, except the anterior third also with thin, appressed pale pubescence; sterna three to six with small punctures and sparse, erect, pale hairs; last sternum with moderate contiguous punctures and sparse, erect, fuscous hairs.

Wings subhyaline; cell 2nd  $R_1+R_2$  three times as long as wide, truncate at the tip; cell  $R_5$  receiving vein  $M_{3+4}$  distinctly beyond the middle; cell  $R_4$  less distinct than  $R_5$  and receiving vein  $M_2$  distinctly beyond the middle.

Legs black, sparsely clothed with pale hairs; posterior coxae with a weak, longitudinal carina on the inner surface; calcaria pale.



*Holotype*.—Male, Blairmont (near New Amsterdam), British Guiana, September, 1923 (F. X. Williams), in collection of University of Minnesota.

*Paratypes*.—Two males, Blairmont, British Guiana, August, 1923 and September, 1923 (F. X. Williams); male, Kartabo, Bartica district, British Guiana, July 3, 1922 (Wm. Beebe); male, Brasso, Trinidad, B. W. I., November 23, 1940 (E. McC. Callan); male, Montserrat, Trinidad, B. W. I., June 30, 1905 (August Busck).

Very similar in appearance to *infracta* but differs in the slightly emarginate scutellum, the presence of a carina on the lateral areas of clypeus extending out from the dilated sector of the median carinae and the slightly less prominent crenulate ridge separating the posterior half of the dorsum of propodeum from the sides of propodeum.

#### EPHUTA INFRACTA, new species

*Male*.—*Holotype*. Entirely black, except the anterior two-thirds of the last sternum yellow; scutellum evenly convex, without a posterior face and without a median, posterior emargination, densely punctate throughout; dorsum of propodeum separated from the sides of the propodeum on the posterior half by a crenulate ridge, the postero-lateral angles not dentate or spinose, but with a distinct, median, blunt tubercle at the tip of the enclosed area; tegulae evenly convex, with small, shallow punctures close on the disc and sparse posteriorly; disc of second abdominal tergum evenly convex, not depressed. Length, 10 mm.

Head black; clypeus clothed with thick, long, subappressed, pale, silky hairs; front clothed with appressed, pale pubescence, thick anteriorly on the antennal tubercles, becoming gradually thinner towards the anterior ocellus; vertex with sparse, erect, pale hairs and a few, erect, fuscous hairs on the ocellar area; genae clothed with thick appressed, and sparse, erect, pale pubescence; mandibles black, the tips castaneous, clothed with thick, pale hairs, except at the tip, edentate at the tip and with a small tooth within near the tip; median carinae of clypeus parallel, extending two-thirds the length of the clypeus from the posterior margin; antennal scrobes carinate above; scape strongly bicarinate beneath; first and second segments of flagellum approximately equal in length; front, vertex and genae with moderate, distinct, contiguous punctures; anterior half of genae separated from the proboscidal fossa by a high carina extending caudad from the articulation of the mandible.

Thorax entirely black; dorsum of pronotum clothed with thin, appressed, pale pubescence, sparse, long, erect, pale hairs, and the posterior margin with a few, long, erect, fuscous hairs; anterior and lateral margins of mesonotum with thin, appressed, pale pubescence, the remainder with sparse, erect, black hairs; scutellum clothed with thin, erect, pale hairs and with a few, erect, black hairs at the middle anteriorly; remainder of thorax clothed with pale pubescence, sparse and short on lateral aspect of pronotum, dense and appressed on mesopleura, sparse, appressed and scattered, erect on the metapleura and sides of propodeum, thin, appressed and erect pubescence on the dorsum and posterior face of propodeum; dorsum of pronotum with moderately large, contiguous to confluent punctures; mesonotum with longitudinal rows of large, shallow, confluent punctures; scutellum evenly convex, without a posterior face and without a posterior median emargination, and with moderately large, contiguous punctures throughout; dorsum of propodeum with a narrow, median enclosed space about three times as long as broad and terminating at the base of a blunt, median tubercle; remainder of dorsum of propodeum and posterior face of propodeum reticulate; posterior half of dorsum of propodeum separated from sides of propodeum by a low, crenulate ridge; postero-lateral angles of dorsum of propodeum not spinose nor tuberculate; lateral aspect of pronotum for the most part glabrous and micropunctate; mesopleura with moderate, distinct, contiguous punctures, mostly concealed by the dense pubescence; metapleura glabrous and micropunctate, except a few, large, shallow, confluent punctures ventrally; sides of propodeum reticulate; tegulae large, glabrous, with fine punctures, the latter close but distinctly separated anteriorly and becoming sparse posteriorly; tegulae clothed with sparse, fuscous pubescence, except the lateral margins with the pubescence pale.

Abdomen black, except the anterior two-thirds of the last sternum yellow; first tergum with moderately large, contiguous punctures, more or less concealed by dense, appressed, pale pubescence and sparse, erect, pale hairs; second tergum evenly convex, the disc not at all depressed, with moderate, distinct, slightly separated punctures throughout, clothed with sparse, erect, pale hairs on the anterior half, and sparse, fuscous to black hairs on the posterior half, except the broad, lateral margins with thin, appressed, pale pubescence, and the posterior margin with a band of dense, pale, appressed pubescence, the posterior band broad at the sides and gradually narrowed towards the



middle to a mere, marginal fringe; terga three to six with small, distinct separated punctures and sparse, appressed and scattered, erect pale hairs, except the lateral margins with thick, appressed, pale pubescence and the posterior margin of each with scattered, inconspicuous, erect, black hairs; last tergum with small, distinct, separated punctures and clothed with sparse, subappressed, pale pubescence; first sternum with a distinct, median, longitudinal carina only slightly elevated anteriorly, and clothed with thin, appressed and erect, pale pubescence; second sternum with moderate punctures, well separated anteriorly, becoming contiguous on the posterior half, clothed throughout with very thin, inconspicuous, appressed, pale pubescence and sparse, erect, pale hairs, the appressed, pale pubescence thick at the posterior margin, except at the middle; sterna three to six with small, scattered punctures and sparse, erect, pale hairs; last sternum with moderately small, contiguous punctures and sparse, erect, pale hairs.

Wings subhyaline to subfuscous; cell 2nd  $R_1+R_2$  three times as long as wide, truncate at the tip; cell  $R_5$  receiving vein  $M_{3+4}$  slightly beyond the middle; cell  $R_4$  less distinct than  $R_5$  and receiving vein  $M_2$  slightly beyond the middle.

Legs black, sparsely clothed with pale hairs; posterior coxae with a weak, longitudinal carina on the inner surface; calcaria pale.

*Holotype*. — Male, Bartica, British Guiana, May 17, 1901, in collection American Entomological Society, Philadelphia, Pa.

*Paratypes*. — Male, Bartica, British Guiana, May 17, 1901; male, Bartica, British Guiana, February 12, 1913; male, Bartica, British Guiana, December 23, 1912; and male, Demerara River, British Guiana, March 12, 1913.

Differs from *perfica* in the absence of a tooth at the postero-lateral angles of the dorsum of propodeum, the latter being separated on the posterior half from the sides of propodeum by a low, crenulate ridge; and in the evenly convex second tergum, the disc of the latter not at all flattened.

#### EPHUTA INDISCRETA, new species

*Male*.—*Holotype*. Black, except the mandibles and the anterior two-thirds of the last sternum yellow; scutellum convex; postero-lateral angles of dorsum of propodeum not dentate or tuberculate; posterior margin of dorsum of propodeum distinctly tuberculate medially; tegulae with sparse, fine punctures throughout; disc of second tergum evenly convex, not at all flattened. Length, 7 mm.

Head black, except the mandibles almost entirely yellow with the tips castaneous; lateral areas of clypeus clothed with long, subappressed, silky, pale pubescence; front and vertex clothed with thin, appressed, pale pubescence and sparse, erect, pale hairs, except the antennal tubercle area with the appressed, pale pubescence thick; genae with thick, appressed, pale pubescence and sparse, erect, pale hairs; mandibles edentate at the tip and with a small tooth within; clypeal carinae subparallel; scape strongly bicarinate beneath; flagellum broken off of holotype, but presumably the first and second segments approximately equal in length; front vertex and genae with moderate, contiguous punctures; genae sharply separated from proboscidal fossa by a carina.

Thorax entirely black; dorsum of pronotum clothed with moderately thick, appressed, pale pubescence, and sparse, erect, pale hairs; mesonotum clothed with sparse, intermixed, pale fuscous and black hairs, except the postero-lateral angles with a very small spot of dense, pale pubescence; scutellum clothed with sparse, erect, pale hairs; dorsum and posterior face of propodeum clothed with moderately thick, subappressed, pale pubescence; lateral aspect of pronotum with sparse, appressed, pale pubescence; mesopleura with thick, appressed, pale pubescence and sparse, erect, pale hairs; metapleura with very sparse, appressed, pale pubescence; sides of propodeum with very sparse, erect, pale hairs; dorsum of pronotum with moderate, contiguous punctures; mesonotum with six longitudinal rows of large, shallow, confluent punctures; scutellum convex, its posterior margin not emarginate, with moderate, contiguous to confluent punctures throughout; dorsum and posterior face of propodeum reticulate, the two separated by a weak, transverse ridge elevated medially into a distinct tubercle; lateral aspect of pronotum glabrous, micropunctate, except the dorsal margin punctate like the dorsum of pronotum; mesopleura evenly convex, with moderate, contiguous to slightly separated punctures more or less concealed by the thick, pale pubescence; metapleura glabrous, micropunctate, except ventrally with a few moderate, close punctures; sides of propodeum reticulate; tegulae glabrous, with sparse, fine punctures throughout, clothed with sparse, fuscous pubescence, except the anterior and inner margins more or less sparsely, pale pubescent.

Abdomen black, except the anterior two-thirds of last sternum yellow; first segment cylindrical, distinctly broader than long; first tergum with moderate, contiguous punctures, largely concealed by the thick, appressed, pale pubescence and sparse, erect, pale hairs; second

tergum evenly convex throughout, not at all flattened, with moderate, distinct, contiguous to slightly separated punctures throughout; second tergum clothed with sparse, erect, pale hairs, except the lateral margins with a narrow fringe of appressed, pale pubescence, and the posterior margin with a band of thick, pale pubescence, broad at the sides and gradually narrowed to a mere fringe at the middle; terga three to six with sparse, small punctures and sparse, erect, pale hairs, the fifth and sixth terga also with a few inconspicuous black hairs at the posterior margin; last tergum with small, distinct punctures and sparse, erect, pale hairs; first sternum with a median, longitudinal carina, not elevated anteriorly, clothed with thin, pale pubescence; second sternum with moderate, contiguous to slightly separated punctures, the anterior third and the posterior margin with thin to sparse, appressed, pale pubescence, the remainder with sparse, erect, pale hairs; sterna three to six with sparse, small punctures, and sparse, erect, pale hairs; last sternum with small, contiguous punctures and sparse, erect, pale hairs on the anterior two-thirds, the posterior third with sparse, fuscous hairs.

Wings subhyaline; cell 2nd  $R_1+R_2$  approximately two and one-half times as long as wide, truncate at the tip; cell  $R_5$  receiving vein  $M_{3+4}$  approximately three-fifths the distance from base to apex; cell  $R_4$  much less distinct than  $R_5$  and receiving vein  $M_2$  slightly beyond the middle.

Legs black, clothed with sparse, pale pubescence; calcaria pale.

*Holotype*.—Male, Blairmont, British Guiana, September, 1923 (F. X. Williams), in collection of University of Minnesota.

Related to *infracta*, but differs in having the mandibles almost entirely pale lemon yellow, with the tips castaneous.

#### EPHUTA FLAVIDENS, new species

*Male*.—*Holotype*. Entirely black, except the mandibles; mandibles lemon yellow except the extreme base and tip castaneous; hypopygium entirely black; postero-lateral angles of dorsum of propodeum not dentate or prominently angulate; posterior margin of dorsum of propodeum distinctly tuberculate medially; tegulae with sparse, fine punctures throughout; sides of propodeum glabrous, unsculptured on anterior half, reticulate on posterior half; disc of second tergum evenly convex, not at all flattened. Length, 7.5 mm.

Head entirely black, except the mandibles as above; mandibles slender, edentate at the tip and with a small tooth within near the tip; cly-

peal carinae subparallel, slightly diverging anteriorly, terminating before the anterior margin in a pair of small tubercles; scape bicarinate beneath; first and second flagellar segments approximately equal in length, but each shorter than the third; genae separated from ventral aspect of head by a distinct carina, the ventral aspect between the two carinae glabrous, impunctate; clypeus laterad of the medial carinae closely micropunctate and clothed with thick, recumbent, pale pubescence; front, vertex and genae with moderate, close, deep punctures, thick, appressed, pale pubescence (except sparse in the ocellar area), and sparse, erect, pale hairs.

Thorax entirely black; dorsum and sides of pronotum with moderately thick, appressed, pale pubescence and sparse, erect, pale hairs; mesonotum with only very sparse, erect, pale hairs; scutellum with erect, pale hairs slightly thicker than on mesonotum; dorsum and posterior face of propodeum with thick, appressed, pale pubescence; mesopleura with thick, appressed, pale pubescence; metapleura and sides of propodeum very sparsely, pale pubescent; dorsum of pronotum with moderately large, contiguous punctures; sides of pronotum closely micropunctate; mesonotum with six longitudinal rows of large, shallow, confluent punctures; scutellum with moderately large, contiguous, deep punctures throughout; scutellum slightly elevated posteriorly and with a short, transverse posterior face; postero-lateral angles of dorsum of propodeum not produced or angulate; dorsum and posterior face of propodeum broadly reticulate, not separated by a transverse carina, but the posterior margin of the dorsum with a distinct, median tubercle; mesopleura with moderate, close punctures throughout; metapleura and anterior half of sides of propodeum glabrous; posterior half of sides of propodeum reticulate.

Abdomen, including the hypopygium, entirely black; first segment cylindrical, distinctly broader than long; first tergum with moderately large, contiguous punctures and thick, appressed, pale pubescence, as well as sparse, erect, pale hairs; second tergum evenly convex throughout, not at all flattened, with moderate, slightly separated punctures on the disc becoming close and contiguous laterally and posteriorly, clothed with sparse, pale hairs, except the lateral margins with a narrow band of dense, appressed, pale pubescence, and the posterior margin with a band of similar pubescence, the band broad at the sides and narrowed to a mere fringe at the middle; terga three to six with sparse, very small punctures and sparse, erect, pale hairs; last tergum with small, close punctures (distinctly larger than on terga three to



six), and sparse, pale pubescence; first sternum with the median carina strongly elevated anteriorly; second sternum with moderately large, close punctures, the anterior two-thirds with thin, appressed, pale pubescence and sparse, erect, pale hairs, the posterior third with only sparse, erect, pale hairs; sterna three to six with sparse, small punctures and sparse, erect, pale hairs; hypopygium with small, close punctures and sparse, pale hairs.

Wings subhyaline; cell 2nd  $R_1+R_2$  approximately two and one-half times as long as wide, subtruncate at the tip; cell  $R_5$  receiving vein  $M_{3+4}$  approximately three-fifths the distance from base to apex; cell  $R_4$  obsolete.

Legs black, clothed with sparse, pale pubescence; calcaria pale.

*Holotype*.—Male, Moraballi creek, Essequibo river, British Guiana (1742), September 7, 1929 (O. W. Richards), in collection of University of Minnesota.

*Paratypes*.—Male, Moraballi creek, Essequibo river, British Guiana (3019), September 15, 1929 (O. W. Richards), three males, Trinidad Rio, Panama, March 19, 1912, March 20, 1912 and March 29, 1912 (A. Busck); male, Santarem, Brazil.

Resembles *indiscreta* in the yellow mandibles, but differs in having the hypopygium entirely black, only the posterior half of the sides of propodeum reticulate, the scutellum slightly elevated posteriorly, and the median carina of the first sternum strongly elevated anteriorly.

#### EPHUTA ERICHTHO, new species

*Female*.—*Holotype*. Head, abdomen and legs black, the thorax ferruginous with the ventral margins of the pleural areas slightly infuscated; first abdominal segment broader than long; second tergum immaculate, except the lateral margins narrowly and the posterior margin broadly, pale pubescent; second tergum with a small, inconspicuous fovea near the lateral margin, the fovea approximately one puncture wide and two punctures long, not filled with pubescence. Length, 10 mm.

Head black, except the mandibles medially and the flagellum beneath tinged with ferruginous; mandibles edentate at the tip and with a small tooth within near the tip; posterior margin of clypeus elevated, arcuate and serrate, the serrations formed by five emarginations, one at the median line and two on each lateral area; mandibles and clypeus with sparse, long, pale hairs; antennal scrobes not carinate above; first segment of flagellum short, equal in length to the second segment from some aspects, slightly longer than the second from other aspects; front, vertex and genae with dense, very deep

punctures; anterior half of front, and vertex and genae entirely with sparse, short, appressed, pale pubescence, and scattered, erect, pale hairs; posterior half of front with sparse, erect, fuscous hairs; genae defined posteriorly by a strong carina, the latter terminating anteriorly in a prominent tooth ventrad of the articulation of the mandible where the genal carina unites with the carina bounding the proboscidal fossa.

Thorax entirely ferruginous, except the ventral margins of the pleural areas somewhat infuscated; dorsal and pleural areas of thorax with dense, deep punctures throughout; dorsum clothed with sparse, erect, fuscous hairs; anterior and propodeal spiracular tubercles only slightly elevated, not forming prominent teeth; scutellar scale entirely absent; pleural areas clothed with sparse, appressed, pale, pubescence, and scattered, erect, pale hairs.

Abdomen black; first segment viewed from above, broader than long; first tergum with dense, deep punctures, excepting the posterior margin, and clothed with thick, appressed, pale pubescence, as well as scattered, long, erect, pale hairs; second tergum with dense, deep punctures, clothed with sparse, black, erect and appressed pubescence, except narrow lateral margins, a broad, complete band at the posterior margin, and the postero-lateral areas with thick, appressed, pale pubescence; second tergum with a small, inconspicuous fovea near each lateral margin, the fovea approximately one puncture wide, two punctures long, and not filled with pubescence; terga three to five with moderate, shallower, elongate, contiguous punctures, sparsely clothed with pale fuscous hairs, except each with an inconspicuous, median spot of thin, appressed, pale pubescence; last tergum with shallow, dense, contiguous to confluent punctures, and a distinct, but not prominent, median, longitudinal ridge extending its entire length; pygidial area defined laterally by a distinct carina, the pygidial area thus not evenly convex, but with a median, longitudinal ridge, a longitudinal depression each side, and then the lateral carinae; last tergum clothed with sparse, erect, pale fuscous hairs; first sternum with a very weak, longitudinal, median carina produced anteriorly into a small tooth; second sternum with moderately large, close, distinct, deep punctures, clothed with scattered, erect, pale hairs and with sparse, appressed, pale pubescence, the latter absent on the disc; sterna three to five with small, shallow, close punctures and sparse, pale pubescence; last sternum tinged with ferruginous, and with a pair of distinct tubercles anteriorly.

Legs black, clothed throughout with sparse, pale pubescence; posterior tibiae slightly produced externally at the tip to form an acute



angle, and bearing a single, short, weak spine; calcaria pale.

*Holotype*.—Female, Kartabo, Bartica district, British Guiana, March 12, 1924 (Wm. Beebe), in collection of University of Minnesota.

Related to the following species, but differs in the very small inconspicuous, lateral foveae of the second tergum, the foveae not filled with pubescence, and in the absence of anterior pale pubescent spots on the second tergum.

#### EPHUTA WEBERI, new species

*Female*.—*Holotype*. Head and abdomen black; thorax ferruginous, the lateral aspects with obscure blackish markings ventrally; second tergum with a pair of lateral, narrow, elongate pits, one near each lateral margin; second tergum maculated with a pair of anterior, subtriangular, pale pubescent spots and a broad, posterior marginal, pale pubescent band; second sternum with a distinct, median carina on the anterior fourth; last sternum with a pair of small, anterior tubercles; intermediate coxae each with a small tubercle at the outer, distal margin. Length, 12 mm.

Head black, except the mandibles dark ferruginous with blackish tips, and the flagellum ferruginous beneath; mandibles edentate at the tip and with a small tooth within near the tip; clypeus elevated posteriorly, the elevated margin distinctly emarginate laterally, not quadridentate; first segment of flagellum almost twice the length of the second; antennal scrobes not carinate above; genal carina elevated immediately posterior to insertion of the mandibles into a very prominent tooth; front, vertex and genae with moderate, distinct, contiguous punctures, the latter deeper on the vertex and genae; mandibles clothed with sparse, pale hairs; clypeus anterior to elevation clothed with thick, erect, fulvous hairs; scape clothed with sparse, pale pubescence; front and vertex clothed with thick, appressed, pale golden pubescence, the anterior half of front also with sparse, erect, pale hairs, the remainder of front and vertex with sparse, erect, fuscous hairs; genae with thick, appressed, pale pubescence and sparse, erect, pale hairs.

Thorax ferruginous, the ventral area of the sides of propodeum and mesopleural areas black, a stripe of black extending dorsally from the antero-ventral angle of mesopleura to beneath the anterior spiracular tubercles and continuing across the dorsum at the anterior margin of pronotum as a narrow obscure stripe; dorsum and lateral aspects of thorax with moderate, contiguous punctures, slightly smaller and much denser on the dorsum than on the lateral aspects; dorsum clothed with sparse, short, suberect, fuscous

hairs, and sparse, long, erect, black hairs; lateral aspects clothed with thick, very short, appressed, pale pubescence, and sparse, erect, pale hairs, the punctation not obscured by the pubescence; propodeal spiracular tubercles large, prominent, yellowish.

Abdomen black, except the first segment ferruginous; first segment distinctly broader than long; first tergum with moderate, dense, deep punctures, clothed with sparse, pale golden pubescence and sparse, erect, pale hairs, and with a posterior marginal band of thick, appressed, pale golden pubescence; second tergum with a very narrow, elongate pit (six times as long as wide) each side near the lateral margin; second tergum with moderate, close but slightly separated, deep punctures, clothed with thick, subappressed, black pubescence and sparse, erect, black hairs, except the erect hairs on the anterior third pale, a pair of anterior, subtriangular spots of pale golden pubescence, the lateral margins with a band of thick, appressed, pale golden pubescence, and a very broad, posterior marginal band of pale golden pubescence; terga three to five with moderate, close, deep punctures anteriorly and medially, clothed with thick, pale golden pubescence and sparse, erect, pale to fuscous hairs, except each with a pair of lateral spots of black pubescence and sparse, erect, black hairs, thus isolating a broad, median, pale spot and a pair of lateral, marginal, pale spots; last tergum ferruginous along the midline on the posterior half, with small close punctures laterad and anterior to pygidial area, and clothed with sparse, erect, golden hairs, except at the midline the pubescence thick; pygidial area narrow, elongate, glabrous on the anterior half, shagreened and margined laterad on the posterior half, the anterior half concealed by the pubescence; first sternum with the median longitudinal carina almost obsolete on the posterior half, elevated and conspicuous on the anterior third; second sternum with a median, longitudinal carina on the anterior fourth, with well separated, moderate punctures, except at the lateral and posterior margins the punctures close, and clothed with sparse, erect, pale hairs, except the anterior, lateral, and posterior margins with thin, appressed, pale pubescence; sterna three to five with small punctures and sparse, erect, pale hairs; last sternum with a pair of small, anterior tubercles, with small, close punctures and sparse, erect, pale hairs.

Legs black, clothed with sparse, pale pubescence; middle coxae with a small tubercle at the outer distal margin; calcaria pale.

*Holotype*.—Female, Oko River, British Guiana, June 25, 1936 (N. A. Weber), in collection of University of Minnesota.

Related to *teapae* Cameron and *tolteca* Blake from Mexico, but differs from both in the black head, abdomen and legs, and the ferruginous thorax, *teapae* being entirely black and *tolteca* entirely ferruginous; both the latter also have the dorsum of thorax somewhat marked with lines or spots of pale pubescence.

EPHUTA AURULENTA (Fabricius),  
(new combination)

1805. *Mutilla aurulenta* Fabricius, Syst. Piez., p. 436, female.

*Specimens Examined*.—Female, Kartabo, Bartica district, British Guiana, October 11, 1920; female, Kartabo, British Guiana; female, Bartica district, British Guiana, November 5, 1924; female, Tropical Research Station, N. Y. Zoological Soc., British Guiana, no. 2266; female, Essequibo, British Guiana; female, Blairmont, British Guiana, November, 1923 (F. X. Williams).

EPHUTA ROXANE, new species

*Female*.—Holotype. Ferruginous, except the vertex, genae, a transverse stripe on the pronotum, the disc and anterior area of second tergum black, and terga three to five very dark ferruginous or blackish; clypeus elevated posteriorly, the elevated margin quadridentate; first and second flagellar segments approximately equal in length; first abdominal segment broader than long; second abdominal tergum with a posterior marginal band of thick, appressed, pale golden pubescence, subinterrupted medially with black; terga three to five, each with a large, transverse, median spot of thick, appressed, pale golden pubescence. Length, 6 mm.

Head ferruginous, except the vertex and genae black; mandibles blackish at the tip, edentate at the tip and with a minute tooth within near the tip; clypeus elevated posteriorly, the elevated margin quadridentate; antennal scrobes not carinate above; first and second segments of flagellum approximately equal in length; front, vertex and genae with small, distinct, deep, contiguous punctures, more or less concealed by the pubescence; genal carina extending posteriorly from insertion of mandibles and elevated into a prominent tooth one-third its length from mandibles; mandibles and clypeus with sparse, erect, pale hairs; scape with thin, appressed, pale golden pubescence; front, vertex and genae with thick, appressed, pale golden pubescence and sparse, erect, pale hairs, the pubescence becoming whitish towards the genal carina.

Thorax entirely ferruginous, except a transverse, black stripe on the pronotum; dorsum and lateral aspects of prothorax with small, distinct, deep, contiguous punctures, except

those on the posterior area of mesonotum, the dorsum of propodeum and posterior face of propodeum very dense and somewhat confluent; scutellar scale absent; propodeal spiracular tubercles small, yellow; pronotal area, anterior half of mesonotal area, and lateral aspects of thorax with thin, appressed, pale pubescence, and sparse, erect, very pale golden hairs; remainder of dorsum of thorax with sparse, erect, inconspicuous, very pale golden hairs.

Abdomen ferruginous, except all the second tergum, excluding the broad, lateral and posterior margins, blackish, and terga three to five very dark ferruginous, almost blackish; first abdominal segment distinctly broader than long; first and second terga and anterior half of terga three to five with small, distinct, deep, contiguous punctures; first tergum clothed with thin, appressed, pale pubescence and sparse, erect, pale hairs; anterior half and lateral fifths of second tergum with thin, appressed, pale pubescence and sparse, erect, pale hairs; posterior margin of second tergum with a broad band of thick, appressed, pale golden pubescence, the anterior margin of the band deeply emarginate medially, subinterrupted; remainder of disc of second tergum with thin, appressed, black pubescence, and sparse, erect, dark fuscous hairs; terga three to five each with a median, transverse spot of thick, appressed, pale golden pubescence occupying almost the median half of each tergum, the lateral fourths with dark fuscous pubescence; last tergum with sparse, erect, fuscous hairs, except the margins of the pygidial area with a few pale hairs and a small median spot of pale pubescence anterior to the pygidial area; pygidial area glabrous, the posterior fourth of the lateral margins defined by a carina; first sternum with the median, longitudinal carina almost obsolete on the posterior half, but strongly elevated and very prominent on the anterior half; first sternum clothed with thin, mostly erect, pale pubescence; second sternum with small, distinct, deep, contiguous punctures throughout, clothed with thin, appressed, pale pubescence and sparse, erect, pale hairs; lateral areas of sterna three to five with distinct, deep, contiguous punctures and clothed with thin, appressed, pale pubescence, the median area of each glabrous, with only a few, fine punctures and a few, erect, pale hairs; last sternum with small punctures and sparse, erect, pale golden hairs.

Legs ferruginous, sparsely clothed with pale hairs; calcaria pale.

*Holotype*.—Female, Moraballi creek, Essequibo river, British Guiana, September 25, 1929 (O. W. Richards), in collection of University of Minnesota.



Related to *elvina*, *copia* and *limbata*, but differs in having the front ferruginous, the black maculation of the thorax limited to a transverse stripe on the pronotum, and in the pubescent maculation of the abdominal terga. The thorax is shorter than in the above species and the posterior face of propodeum is subperpendicular to the dorsum.

*EPHUTA EGERIA*, new species

*Female*.—Holotype. Head, abdomen and legs very dark ferruginous, blackish, the thorax entirely bright ferruginous; first and second segments of flagellum equal in length; first abdominal segment broader than long; second abdominal tergum without a pair of anterior, pale pubescent spots, but with a complete, posterior marginal band of pale pubescence; abdominal terga three to five with a small, median spot of pale pubescence. Length, 4 mm.

Head very dark ferruginous, blackish, except the mandibles and scape ferruginous, the tips of the mandibles castaneous; mandibles edentate at the tips and with a minute tooth within; clypeus elevated posteriorly, the elevated margin quadridentate; first and second segments of flagellum approximately equal in length; antennal scrobes not carinate above; front, vertex and genae with small, deep, contiguous punctures; genal carina extending posteriorly from the insertion of the mandibles and elevated into a prominent tooth one-third of its length from the mandibles; mandibles and clypeus clothed with long, sparse, pale hairs; scape clothed with sparse, pale pubescence; antennal scrobes and anterior margin of front with sparse, pale pubescence; remainder of front and vertex with sparse, short, fuscous pubescence, and scattered, erect, fuscous hairs; genae with sparse, pale pubescence and sparse, erect, pale hairs.

Thorax entirely bright ferruginous; lateral and dorsal aspects of thorax with small, deep, contiguous punctures; lateral aspects of thorax with sparse, short, pale pubescence and sparse, erect, pale hairs; dorsal aspect of thorax with sparse, short, fulvous inconspicuous pubescence, as well as scattered, long, erect, dark fulvous hairs; propodeal spiracular tubercles small, concolorous with the thorax.

Abdomen very dark ferruginous, blackish; first segment distinctly broader than long; first tergum ferruginous, with small, deep, contiguous punctures, clothed with sparse, short, pale pubescence and sparse, erect, pale hairs; second tergum with small, deep, contiguous punctures throughout, clothed with sparse, short, recumbent, blackish pubescence, the anterior third also with sparse, erect, pale hairs, the posterior two-thirds, except the posterior margin, with

sparse, erect, dark fuscous hairs, with an elongate spot of pale pubescence near the lateral margins, and the posterior margin with a narrow, complete band of thick, pale, appressed pubescence slightly narrowed medially; terga three to five with small, close punctures anteriorly, each clothed with sparse, short, dark fuscous pubescence and sparse, erect, fuscous hairs, except a small, median spot of thick, pale pubescence; last tergum with small, deep, contiguous punctures laterad of the pygidial area and with sparse, erect, pale hairs; pygidial area elongate, glabrous, the posterior third weakly shagreened and very weakly margined laterally; first sternum with a complete median, longitudinal carina, not elevated anteriorly; second sternum with small, deep, contiguous punctures and sparse, erect, pale hairs; posterior margin of sternum three to five with small, close punctures and sparse, erect, pale hairs; last sternum glabrous, closely punctate at the lateral margins, and with a pair of small, distinct, anterior tubercles.

Legs dark ferruginous, blackish, clothed with sparse, erect, pale hairs; calcaria pale.

*Holotype*.—Female, New Amsterdam, British Guiana, July, 1923 (F. X. Williams), in collection of University of Minnesota.

Distantly related to *hylonome*. Differs from that and other small British Guiana females of this genus in the entirely ferruginous thorax, the small, median spots of pale pubescence on abdominal terga three to five, the dark ferruginous, blackish legs, and the anterior tubercles of the last sternum.

*EPHUTA COPIA*, new species

*Female*.—Holotype. Head and second abdominal tergum black; posterior abdominal terga and second sternum more or less infuscated; thorax ferruginous with lateral fuscous markings; clypeus elevated posteriorly, the elevated margin dentate; first and second segments of flagellum approximately equal in length; first abdominal segment distinctly broader than long; second abdominal tergum without a pair of pale pubescent spots, the posterior marginal, pale pubescent band narrowly interrupted medially with black. Length, 8 mm.

Head black, except the mandibles with dark tips, clypeus, antennal tubercles and antennae, all ferruginous; mandibles edentate at the tip and with a small tooth within, clothed with sparse, pale hairs; clypeus elevated posteriorly, the elevated margin quadridentate; first and second segments of flagellum approximately equal in length; antennal scrobes not carinate above; front, vertex and genae with moderate, distinct, deep, contiguous punctures, front and

vertex with sparse, appressed, pale pubescence, and sparse, erect, blackish hairs; genae with thick, appressed, pale pubescence and sparse, erect, pale hairs; genal carina extending posteriorly from the insertion of the mandibles and elevated into a distinct small tooth at one-third its length from mandible.

Thorax ferruginous, with three pairs of lateral, obscure, fuscous spots on the pronotal area, mesonotal area and propodeum respectively, the propodeal spots less distinct than the others; dorsum and lateral aspects of thorax with moderate, distinct, deep, contiguous punctures throughout; prothorax with a narrow band of thick, appressed, pale pubescence at its anterior margin, the band more conspicuous on the lateral aspects than on the dorsum; dorsum of thorax with sparse, erect, dark hairs; lateral aspects of thorax with very sparse, inconspicuous, appressed, pale pubescence and sparse, erect, pale hairs; scutellar scale absent; propodeal spiracular tubercles small, yellow.

Abdomen ferruginous, except the second tergum black, and the following terga and second sternum more or less infuscated; first abdominal segment distinctly broader than long; first tergum with moderate, distinct, deep, contiguous punctures, clothed with thick, appressed, pale pubescence and sparse, erect, pale hairs; lateral and posterior margins of the black second tergum ferruginous, but the color obscured by thick, appressed, pale pubescence, the pale pubescent, posterior marginal band narrowly interrupted medially with black; second tergum with moderate, distinct, deep, contiguous punctures throughout, the bottoms of the punctures showing ferruginous in certain lights, the disc clothed with sparse, erect, blackish hairs, the lateral and anterior areas with sparse, erect, pale hairs; terga three to five with moderately small, deep punctures anteriorly, with sparse, erect, pale hairs, and each with a pair of small, obscure, median spots of thick, appressed, pale pubescence, the spots separated at the middle by sparse, blackish pubescence; last tergum with small, distinct punctures, sparse, erect, fuscous hairs laterally, and pale, erect hairs towards the middle; pygidial area narrow, very slightly elevated at its anterior terminus; second sternum with moderate, distinct, close punctures, clothed throughout with thin, appressed, pale pubescence, and sparse, erect, pale hairs; sterna three to five with small, close punctures and sparse, erect, pale hairs at the posterior margin; last sternum with shallow, indistinct punctures and erect, pale golden hairs, without anterior lateral tubercles.

Legs ferruginous, sparsely clothed with pale hairs; calcaria pale.

*Holotype*.—Female, Blairmont, British Guiana, October, 1923 (F. X. Williams), in collection of University of Minnesota.

*Paratypes*.—Female, Blairmont, British Guiana, October, 1923 (F. X. Williams); female, Blairmont, British Guiana, August, 1923 (H. E. Box).

Related to *elvina*, but differs in the infuscated markings of the thorax, the interrupted, posterior marginal band of the second abdominal tergum, the paired pale pubescent spots on the third to fifth terga, the complete pale pubescent band at the anterior margin of the pronotum, its darker ferruginous color, and larger size.

#### EPHUTA ELVINA, new species

*Female*.—*Holotype*. Head and second abdominal tergum blackish, the remainder of the body pale ferruginous, except the thorax with a pair of lateral, vague, elongate, fuscous spots extending from the pronotum to the propodeum, and the anterior two-thirds of the dorsum and posterior face of propodeum entirely infuscated; clypeus elevated posteriorly, the elevated margin dentate; first and second segments of flagellum equal in length; first abdominal segment distinctly broader than long; second abdominal tergum without a pair of pubescent spots. Length, 3.5 mm.

Head blackish, except mandibles yellow with castaneous tips, the antennal tubercles, scape, pedicel and first two flagellar segments yellow, and the remainder of the flagellum fuscous; front, vertex and genae clothed with thin, appressed and subappressed, very pale golden pubescence, thinner on the posterior half of front and anterior half of vertex than elsewhere, the front and vertex also with sparse, erect, fuscous hairs; mandibles edentate at the tip and with a slight tooth within near the tip; clypeus elevated posteriorly, the elevated margin quadridentate; antennal scrobes not carinate above; scape with distinct punctures distally and clothed with sparse, pale pubescence; first and second segments of flagellum approximately equal in length; front, vertex and genae with small, distinct, deep, contiguous punctures, the bottoms of the punctures showing ferruginous in certain lights; genal carina extending from the insertion of the mandibles posteriorly and elevated into a distinct tooth at one-third its length from mandible.

Thorax pale ferruginous, except the dorsum with a pair of lateral, elongate, vague, infuscated spots extending from the anterior margin to the propodeal spiracular tubercle, and the anterior two-thirds of the dorsum and posterior face of propodeum entirely infuscated; thorax clothed throughout with very sparse, appressed,



inconspicuous, pale pubescence, and sparse, erect, pale hairs, except the dorsum of the thorax with sparse, erect, fuscous hairs, and the anterior margin of the lateral aspect of pronotum with a narrow stripe of thick, appressed, pale pubescence; dorsum and lateral aspects of thorax with small, distinct, deep, contiguous punctures throughout; propodeal spiracular tubercles small, yellow; scutellar scale entirely absent.

Abdomen pale ferruginous, except the second tergum infuscated, but with narrow, ferruginous, posterior and lateral margins; first segment distinctly broader than long; first tergum clothed with sparse, appressed, pale pubescence and sparse, erect, pale hairs, and with small, distinct, deep, contiguous punctures throughout; second tergum with small, distinct, deep, contiguous punctures, except the latter shallow at the ferruginous posterior margin, the bottom of the punctures showing ferruginous in certain lights; second tergum clothed with very sparse, appressed, pale pubescence, the large infuscated area also with sparse, erect, fuscous hairs, the ferruginous lateral margins with the pale pubescence thin but distinct, and the posterior ferruginous margin with thick, appressed, very pale golden pubescence; terga three to five with small, shallow punctures, and with thin, appressed, very pale golden pubescence and sparse, erect, pale golden hairs; last tergum with small, shallow punctures and sparse, erect, pale golden hairs, except the large pygidial area glabrous, impunctate, bare; pygidial area not defined laterally by a carina, except the posterior fifth weakly shagreened and with carinate lateral margins; first sternum with a median, longitudinal carina, slightly elevated at its anterior terminus; second sternum with small, distinct, deep, contiguous punctures throughout, and clothed with thin, appressed, pale pubescence and sparse, erect, pale hairs, the pale pubescence somewhat thicker at the posterior margin; sterna three to five with small punctures and sparse, erect, pale hairs; last sternum with small punctures and sparse, erect, pale hairs, apparently not tuberculate anteriorly.

Legs pale ferruginous, sparsely clothed with pale hairs; calcaria pale.

*Holotype*.—Female, Moraballi creek, Esse- quibo river, British Guiana, September 24, 1929 (O. W. Richards), in collection of University of Minnesota.

Distinguished from *copia* by the fuscous markings of the thorax, the complete pale golden, posterior marginal pubescent band of second tergum, and the ferruginous abdomen, excepting the fuscous second tergum.

#### EPHUTA LIMBATA, new species

*Female*.—*Holotype*. Head and all abdominal terga, except the first, black; abdominal sterna ferruginous; thorax and first abdominal segment pale ferruginous, the dorsum of thorax with distinct, lateral, black lines united anteriorly on the pronotum and posteriorly on the propodeum; antennal tubercles, antennae, clypeus, mandibles and legs yellow; first abdominal segment distinctly broader than long; first and second segments of flagellum approximately equal in length; posterior marginal band of second tergum and all the following terga clothed with dense, appressed, pale golden pubescence. Length, 5 mm.

Head black, except the mandibles, clypeus, antennal tubercles and antennae yellow; mandibles edentate at the tip and with a small tooth within; clypeus elevated posteriorly, the elevated margin quadridentate; antennal scrobes not carinate above; first and second segments of flagellum approximately equal in length; front, vertex and genae with small, distinct deep, contiguous punctures more or less obscured by thick, appressed, pale golden pubescence and sparse, erect, pale golden hairs; genal carina extending posteriorly from insertion of mandibles and elevated into a prominent tooth one-third its length from mandibles.

Thorax pale ferruginous, the dorsum with a pair of distinct, longitudinal, lateral stripes sub-interrupted at the anterior spiracles and propodeal spiracles, and united medially on the pronotum and propodeum, thus enclosing a median, longitudinal, ferruginous, integumental stripe on dorsum of thorax; median ferruginous stripe with sparse, erect and suberect, pale golden hairs; remainder of thorax with thin, appressed, pale pubescence and sparse, erect, pale hairs; dorsum and lateral aspects of thorax with small, distinct, deep, contiguous punctures; propodeal spiracular tubercles small and yellow; scutellar scale absent.

Abdomen black, except the first segment pale ferruginous, and the sterna dark ferruginous; first and second terga with small, distinct, deep, contiguous punctures; first tergum with sparse, appressed, pale pubescence, and sparse, erect, pale hairs; second tergum with very sparse, appressed, pale pubescence together with sparse, erect, pale hairs on anterior third, the median half with sparse, appressed, fuscous pubescence and sparse, erect, fuscous hairs, the lateral areas with thin pale, appressed pubescence and sparse, erect, pale hairs, and the posterior margin with a band of thick, appressed, pale golden pubescence, the anterior margin of the band slightly sinuate; remaining terga clothed throughout with thick, appressed, pale golden pubescence

and sparse, erect, pale golden hairs; pygidial area narrow, elongate, glabrous; second sternum with small, close, distinct, deep punctures throughout, clothed with thin, appressed, pale pubescence and sparse, erect, pale hairs; sterna three to five with small, indistinct punctures, thin, appressed, pale pubescence and sparse, erect, pale hairs at the posterior margin; last sternum with small, sparse, shallow punctures, and sparse, erect, pale hairs, but without anterior, lateral tubercles.

Legs yellow, clothed with sparse, pale yellow hairs; calcaria pale.

*Holotype*.—Female, Kartabo, British Guiana, July-August, 1920 (W.M. Wheeler), in Museum of Comparative Zoology, Cambridge, Mass.

Related to *elvina* and *copia*, but with the black maculations of the thorax very distinct and united anteriorly and posteriorly.

#### EPHUTA HYLONOME, new species

*Female*.—Holotype. Ferruginous, except the head and abdomen above blackish, and the dorsum of thorax with broad, lateral stripes of black, the stripes united medially on the pronotum and propodeum and distinctly interrupted at the propodeal spiracular tubercles; clypeus elevated posteriorly, the elevated margin quadridentate; first and second flagellar segments approximately equal in length; first abdominal segment broader than long; second abdominal tergum with a posterior marginal band of thick, appressed, pale golden pubescence; abdominal terga three to five each with a transverse, median spot of pale golden pubescence. Length 5.5 mm.

Head black, except the mandibles, clypeus, antennal tubercles and antennae pale ferruginous; mandibles with dark tips, edentate at the tip and with a minute tooth within; clypeus elevated posteriorly, the elevated margin quadridentate; first and second segments of flagellum approximately equal in length; antennal scrobes not carinate above; front, vertex and genae with small, distinct, deep, contiguous punctures; genal carina extending posteriorly from insertion of mandibles and elevated into a prominent tooth one-third of its length from mandibles; mandibles and clypeus clothed with sparse, erect, pale golden hairs; scape clothed with thin, appressed, pale golden pubescence; anterior third of front with thick, appressed, pale pubescence and sparse, erect, pale hairs; median transverse third of front with sparse, erect, pale fuscous hairs; posterior third of front, vertex entirely and genae entirely with thick, appressed, pale golden pubescence, and sparse, erect, pale golden hairs, that on the genae paler than on the vertex, almost white.

Thorax ferruginous, except a pair of very broad lateral stripes on the mesonotal area extending down on the pleura and forward on to the pronotum where they are confluent medially, the stripes interrupted at the propodeal spiracular tubercles, and then continued on the propodeum and confluent medially posteriorly thus forming a U-shaped black mark on the propodeum; black markings of thorax almost but not quite enclosing a very broad, median, longitudinal, ferruginous stripe on the dorsum of thorax; dorsum and lateral aspect of thorax with small, distinct, deep, contiguous punctures, except the latter becoming dense and somewhat confluent on the posterior part of mesonotal area and on the propodeum; scutellar scale absent; propodeal spiracular tubercles small and yellow; thorax clothed with thin, appressed, pale pubescence and sparse, erect, pale hairs, except the pale, appressed pubescence thick on lateral aspect of pronotum, and the median, longitudinal, ferruginous stripe on dorsum with only sparse, erect, pale golden hairs.

Abdomen above, including the first segment, blackish or very dark ferruginous, beneath ferruginous; first segment distinctly broader than long; first and second terga with small, distinct, deep, contiguous punctures, the bottoms of the punctures showing ferruginous in certain lights; anterior half of third to fifth terga with small, distinct, contiguous punctures; lateral areas of last tergum with very small, close, shallow punctures; first tergum with erect, pale hairs; anterior half and lateral fourths of second tergum with thin, appressed, pale pubescence and sparse, erect, pale hairs; post-medial area of second tergum with thin, appressed, black pubescence and sparse, erect, fuscous hairs, the posterior margin with a broad band of thick, appressed, pale golden pubescence, the anterior margin of the band emarginate medially, subinterrupted; terga three to five each with a transverse spot of thick, appressed, pale golden pubescence covering approximately the median half of the tergum, the lateral fourths fuscous pubescent; lateral areas of last tergum with sparse, erect, pale golden hairs; pygidial area glabrous; first sternum with the median, longitudinal carina almost obsolete on the posterior half, but strongly elevated and conspicuous on the anterior half; second sternum with small, distinct, deep, contiguous punctures throughout and with thin, appressed, pale pubescence and sparse, erect, pale hairs; lateral thirds of sterna three to five with small, distinct, contiguous punctures and thin, appressed, pale pubescence, the posterior margin of each with a very thin fringe of sparse, erect, pale hairs; lateral areas of last sternite



with small punctures and sparse, erect, pale ferruginous hairs.

Legs entirely ferruginous, clothed with sparse, pale hairs; calcaria pale.

*Holotype*.—Female, Moraballi creek, Esse-  
quibo river, British Guiana, August 30, 1929  
(O. W. Richards), in collection of University  
of Minnesota.

Somewhat similar to *limbata*, but the thorax is shorter and the posterior face of propodeum almost perpendicular; the black markings of the pronotum and mesonotum are broader than in *limbata*, the head black but the punctures of the front showing ferruginous at the bottom, and abdominal terga three to five maculated with black laterally.

Genus TRAUMATOMUTILLA André

KEY TO THE FEMALES

1. Postero-lateral angles of head rounded,  
not prominent, not carinate or tuber-  
culate ..... 2
- Postero-lateral angles of head prominent,  
distinctly or conspicuously carinate or  
tuberculate ..... 7
2. Second abdominal tergum with four yel-  
lowish integumental spots; lateral mar-  
gins of mesonotum not toothed ..... 3
- Second abdominal tergum with only two  
ferruginous integumental spots; lateral  
margins of mesonotum with a promi-  
nent tooth ..... 6
3. Dorsum of thorax and propodeum with-  
out a median, longitudinal carina; scu-  
tellar scale broad, well developed  
*indica* (Linnaeus)
- Dorsum of thorax and propodeum with a  
distinct, median, longitudinal carina;  
scutellar scale absent ..... 4
4. Vertex with an arcuate band of dense,  
appressed, pale, glittering pubescence  
extending from eye margin to eye mar-  
gin (Bolivia and Peru)...*indicoides* Mickel
- Vertex entirely black pubescent..... 5
5. Lateral, pale pubescent stripes on dorsum  
of thorax extending anteriorly only two-  
thirds the length of the mesonotum  
(Brazil and Bolivia).....*parallela* (Klug)
- Lateral, pale pubescent stripes on dorsum  
of thorax extending anteriorly to the  
posterior margin of the pronotum (Ven-  
ezuela, British Guiana) ...*gausapata*, n. sp.
6. Posterior two-thirds of pygidial area  
transversely rugose; pale pubescent  
markings of head and thorax faint, in-  
conspicuous (British Guiana, French  
Guiana and Brazil).....*incerta* (Spinola)
- Pygidium longitudinally rugose, the rugae  
not reaching the posterior margin; pale

pubescent markings of head and thorax  
strong and conspicuous (Peru)

*weyrauchi* Mickel

7. Pygidial area about as broad as long, oc-  
cupying nearly all the surface of the last  
tergum; terga three to five, each with a  
median spot of pale, glittering pubes-  
cence ..... 8
- Pygidial area decidedly longer than broad,  
occupying only the median area of the  
last tergum; terga three to five without a  
definite, median spot of pale, glittering  
pubescence .....*latona*, n. sp
8. Mesonotum with a pair of lateral spots of  
dense, pale, glittering pubescence..... 9
- Mesonotum without such spots, entirely  
black pubescent....*dubia dubia* (Fabricius)
9. Anterior pair of integumental spots on  
second abdominal tergum small and  
weak, or entirely absent (Brazil; Ama-  
zon valley).....*dubia albata* (Cresson)
- Anterior pair of integumental spots on  
second abdominal tergum well devel-  
oped (British Guiana and Dutch Gui-  
ana) .....*dubia spilota* (Gerstaecker)

KEY TO THE MALES

1. Mesopleura protuberant above ..... 2
- Mesopleura convex, but not protuberant  
above ..... 4
2. Proximal two-thirds of wings hyaline, the  
distal third fuscous; second abdominal  
sternum with a pubescent fovea  
*sphegea* (Fabricius)
- Wings fuscous throughout; second abdom-  
inal sternum without a pubescent fovea 3
3. Clypeal fringe pale, glittering; lateral scu-  
tellar processes rounded at tip; fourth  
sternum black pubescent and with a  
black posterior marginal fringe; sec-  
ond tergum with scattered, small pun-  
ctures intermixed with fine, separated  
punctures (Brazil) .....*dentata* (Smith)
- Clypeal fringe fuscous; lateral scutellar  
processes obliquely truncate; fourth  
sternum with very sparse, erect, pale  
hairs and with a pale posterior marginal  
fringe; second tergum with fine pun-  
ctures throughout .....*dignitosa*, n. sp
4. Proximal half of wings hyaline, the distal  
half fuscous; dorsum of abdomen  
clothed throughout with dense, glitter-  
ing, golden pubescence; second abdom-  
inal sternum without a pubescent fovea  
*dubia dubia* (Fabricius)
- Wings fuscous throughout; dorsum of ab-  
domen largely black pubescent; second  
abdominal sternum with a pubescent  
fovea .....*bartica*, n. sp.

## TRAUMATOMUTILLA INDICA (Linnaeus)

1758. *Mutilla indica* Linnaeus, Syst. Nat., ed. x, vol. 1, p. 583, female.
1787. *Mutilla diadema* Fabricius, Mant. Ins., vol. 1, p. 311, female.
1821. *Mutilla diadema* Klug, Nov. Acta Acad. Nat. Curios., vol. 10, P. 2, p. 314, T. 22, F. 12, female. (in part; specimens from Para, Brazil).
1874. *Mutilla indica* Gerstaecker, Arch. f. Naturg., vol. 40, p. 72, female (in part; nec specimens from Bogota, and Bolivia).
1912. *Traumatomutilla indica* Cameron, Timchri, Journ. Roy. Agri. Com. Soc. Brit. Guiana, (3), vol. 2, p. 415, female.
1937. *Traumatomutilla indica* Mickel, Rev. Ent., Rio, vol. 7, p. 196, female.

*Type*.—Female, India, in Natural History Museum, Stockholm, Sweden. A specimen from Parimaribo, Surinam, was sent to Dr. A. Roman in 1931. He compared the specimen with Linnaeus's type and found them to be identical. Linnaeus erroneously cited the locality as India.

Three specimens labeled *diadema* by Fabricius were examined in 1931, one from the Kiel collection, one from the Copenhagen collection, and one from the Zoological Museum Academy, Leningrad, U. S. S. R. The latter specimen is labeled "*diadema* Fbr. Hb., Surin." in Germar's handwriting, and has been labeled "lectotype" for the following reasons: Fabricius described *diadema* from the Hübner collection. One part of Hübner's collection was sold to Germar. Germar's collections were acquired through inheritance by Schaum (a nephew of Germar). The Zoological Museum der Universität, Berlin, Germany, bought part of the Schaum collection from Stein and other parts were dispersed before Schaum's death. No specimen in the collection of the Berlin Museum fulfills the conditions necessary for a lectotype of *diadema*. Schaum sold or gave part of his collection to Kraatz before his death and the specimen designated above as lectotype was a part of the material acquired by Kraatz. This specimen was acquired by the Zoological Museum Academy, Leningrad, from Kraatz. It fulfills all the necessary conditions for a type specimen: it agrees with the description; it comes from the type locality, Surinam; and it was originally a part of the Hübner collection. All three of the above specimens are the same as *indica* Linnaeus.

*Distribution*.—Surinam, French Guiana, British Guiana, Brazil (states of Bahia, Parahyba, Rio Grande do Norte, Ceara, Para and northern Amazonas), Venezuela and Colombia.

*British Guiana Specimens Examined*.—Fe-

male, Penal settlement, Bartica district, 1917; three females, New Amsterdam, August, 1923 (F. X. Williams); female, Blairmont, August 17, 1923 (H. E. Box); two females, Blairmont, September 6, 1923 (H. E. Box); nine females, Blairmont, September, 1923 (F. X. Williams); two females, Blairmont, November, 1923 (F. X. Williams); three females, Blairmont, 1923-24 (H. E. Box); female, Georgetown, July, 1921 (A. Busck); female, Georgetown (Demerara), spring, 1878; female, Demerara (Harper); female (1586), Berbia savannah, January 25, 1933 (D. Vesey-Fitzgerald); female, Tumatumari, July, 1923 (F. X. Williams); female, mouth of Courontyne river, July 5, 1936 (N. A. Weber); female, Rupununi river, September, 1913 (Thurston collection).

## TRAUMATOMUTILLA SPHEGEA (Fabricius)

1804. *Mutilla sphegea* Fabricius, Syst. Piez., p. 435, male.
1811. *Mutilla fasciata* Olivier, Encycl. Méthod. Insect, vol. 8, p. 55, male.
1841. *Mutilla argyra* Spinola, Ann. Soc. Ent. France, vol. 10, p. 85, male.
1845. *Mutilla argentea* (Spinola) Lepeletier, Hist. Nat. Insect. Hymén., vol. 3, p. 636, male.
1912. *Ephuta sphegea* Cameron, Timchri, Journ. Roy. Agri. Com. Soc. British Guiana, (3), vol. 2, p. 414, male.
1937. *Traumatomutilla argyra* Mickel, Rev. Ent., Rio, vol. 7, p. 197, male. (New synonymy).

*Types*.—*sphegea* Fabricius.—Essequibo (Schmidt), Mus. Sehestadt, in Zoological Museum, University of Copenhagen.

*argyra* Spinola.—Lectotype. Cayenne, Museo Zoologia et Anatomia Comparata della R. Università, Torino, Italy.

*argentea* (Spinola) Lepeletier. Location unknown.

*fasciata* Olivier. Location unknown.

The types of *sphegea* Fabricius and *argyra* Spinola have been examined and found to be identical. Lepeletier states that *argentea* was described from a specimen in the Spinola collection bearing that name. When the writer studied the Spinola collection in 1931 no specimen labeled *argentea* could be found.

*British Guiana Specimens Examined*.—Two males, Blairmont, September, 1923 (F. X. Williams); two males, Blairmont, November, 1923



(F. X. Williams); male, Blairmont, September 6, 1923 (H. E. Box); male, Blairmont, 1922-24 (H. E. Box); male, Rockstone, June 2, 1929 (A. Mackie); male, Rockstone, July 9, 1911; male, Mahaica, Dem., June 20, 1927; male, Camaria, July 30, 1924 (William Myers); male.

*Distribution*.—British Guiana, Surinam, Cayenne and Brazil.

This may be the male of *indica* (Linnaeus).

TRAUMATOMUTILLA GAUSAPATA, new species

1874. *Mutilla parallela* var. Gerstaecker, Arch. f. Naturg., vol. 40, p. 75, female (Orinoco specimen). (New synonymy).

*Female*.—Holotype. Black, the second abdominal tergum with two pair of yellow integumental spots, the anterior pair linear, the posterior pair subrectangular, transverse, slightly oblique, and separated medially by a space slightly less than their greatest width; dorsum of propodeum with a median, longitudinal carina; dorsum of thorax with a pair of lateral, linear stripes of pale, glittering pubescence extending from the anterior margin of the mesonotum to the posterior margin of the propodeum; tarsi above clothed with pale, glittering pubescence; tibiae externally with black hairs and with a brush of black hairs at the proximal end externally. Length, 18 mm.

Head entirely black, and clothed with sparse, black pubescence, except the genae anteriorly near the insertion of the mandibles, the caudal aspect of the head and the scape, all with pale, glittering pubescence, the scape with the pubescence thick, elsewhere very sparse, appressed and erect; mandibles edentate and with a small tooth within near the tip; antennal tubercles contiguous, rugose; first segment of flagellum much longer than the second, almost as long as two and three combined; antennal scrobes strongly carinate above; front, vertex and genae with moderately large, dense, contiguous to confluent punctures; posterior margin of genae strongly carinate, the carina extending almost to a groove at the base of a high, sharp carina margining the proboscis fossa; postero-lateral angles of head not carinate or tuberculate.

Thorax entirely black, clothed with black pubescence, except a pair of lateral, linear stripes of dense, appressed, pale, glittering pubescence extending from the anterior margin of the mesonotum to the posterior margin of the propodeum and converging slightly towards the rear, and the ventral third of the lateral aspect of the pronotum, ventral half of mesopleura and metapleura, as well as a small spot at the ventral margin of the sides of the propodeum, all with

dense, appressed, pale, glittering pubescence; humeral angles not dentate; anterior spiracles prominent; lateral margins of mesonotum weakly angulate medially and strongly constricted before the prominent propodeal spiracles; mesonotum and dorsum of propodeum with a median longitudinal carina; scutellar scale absent; pronotum, mesonotum and dorsum of propodeum with large, dense, contiguous and sometimes confluent punctures; posterior face of propodeum finely, closely punctate; lateral aspect of pronotum separated from dorsum of pronotum by a glabrous ridge, interrupted by deep punctures; lateral aspect of pronotum with moderate, close punctures, much less coarsely punctate than the dorsum; mesopleura micropunctate on anterior half, the remainder coarsely punctate; micropunctate area of mesopleura with thick, appressed, pale pubescence, the ventral two-thirds of the coarsely punctate area with thick, appressed, pale pubescence and sparse, long, erect, pale hairs, the dorsal third with sparse, black, appressed hairs, and sparse, long, erect, black hairs; ventral half of metapleura micropunctate and with thick, appressed, pale pubescence, the dorsal half glabrous, impunctate; sides of propodeum with large, close, coarse punctures, clothed with scattered, erect, black hairs, except a few, erect hairs near the anterior margin pale.

Abdomen black, except the second tergum with two pairs of yellow, integumental spots, the anterior pair linear, contiguous with the anterior margin of the tergum and approximately one-fourth the length of the tergum, the posterior pair transverse, slightly oblique, and separated medially by about two-thirds their greatest width; all the yellow spots glabrous, the anterior pair each with one or two setiferous punctures, the posterior pair impunctate; first abdominal segment disciform; first tergum with a pair of longitudinal stripes of dense, appressed, pale pubescence, the stripes contiguous posteriorly with the anterior, yellow spots of the second tergum and distinctly broader at the posterior margin than the yellow spots; interstripe area of first tergum clothed with thick, appressed, black pubescence and scattered, erect, black hairs; areas of first tergum laterad of the stripes with only scattered, erect, pale hairs; second tergum with lateral margins, felt line, and a median spot at the posterior margin all densely, pale pubescent, otherwise, except the yellow spots, with thick, appressed, black pubescence and scattered, erect, black hairs; second tergum coarsely punctate beneath the black pubescence; third and fourth terga with thick, recumbent, black pubescence and scattered, erect, black hairs, except each with the lateral

margins and a median, elongate spot densely, pale pubescent; third, fourth and fifth terga all closely punctured, the fifth with the lateral margins black pubescent, but with a median, elongate spot of dense, appressed, pale pubescence; last tergum with a large pygidial area well defined and transversely rugose, the anterior half of the tergum with a median, pale pubescent spot, the lateral areas, black pubescent; median, pale pubescent spots on terga two, three, four, five and last, forming a longitudinal pale line, narrowest anteriorly and slightly but distinctly broader at its posterior terminus; all the sterna with pale hairs or pubescence, except the posterior marginal fringe of the fifth and all the pubescence of the last, black; broad, posterior marginal, pale, appressed pubescent bands on second, third and fourth sterna, otherwise the pale pubescence scattered or sparse and erect; first sternum with a median, elevated, longitudinal carina; second sternum with large, separated punctures; posterior margin of second sternum and third, fourth, fifth and last sterna with moderate, close punctures.

Legs black, clothed with pale hairs, except the middle and hind tibiae externally with black spines and scattered black hairs, and the tarsal segments beneath with coarse, black hairs; calcaria pale.

*Holotype*.—Female, Rupununi savannah, British Guiana (794), October 13, 1932 (D. Vesey-Fitzgerald), in collection of University of Minnesota.

*Paratypes*.—Female, Orinoco (Moritz) (this is the specimen designated as "*parallela* var." by Gerstaecker); female, Akuriman, Venezuela, October, 1940 (Paul Anduze); female, Arabapo, Mt. Roraima, Venezuela (1284), November 24, 1932 (D. Vesey-Fitzgerald); female, Caroni-Amazon watershed, Brazil-Venezuela boundary (1353), November 29, 1932 (D. Vesey-Fitzgerald); female, Waranama, British Guiana, November 20, 1936 (Mrs. L. Ogilvie); female, Rupununi savannah, British Guiana (795), October 13, 1932 (D. Vesey-Fitzgerald); female, Ichilibar, Pakarima foothills, British Guiana (863), October 20, 1932 (D. Vesey-Fitzgerald); female, Kerikabaru, Pakarima foothills, British Guiana (914), October 22, 1932 (D. Vesey-Fitzgerald); female, Minas Geraes, Brazil (Reinhardt), Mus. Drownsen.

Related to *parallela* Klug, *borba* Cresson and *indicoides* Mickel; all have a median, longitudinal carina on the dorsum of the propodeum, and the dorsum sloping towards the lateral margins from the median carina. The three differ from each other in pale pubescent markings and in geographical distribution.

#### TRAUMATOMUTILLA INCERTA (Spinola)

1841. *Mutilla incerta* Spinola, Ann. Soc. Ent. France, vol. 10, p. 93, female.

1937. *Traumatomutilla incerta* Mickel, Rev. Ent., Rio, vol. 7, p. 196, female.

*British Guiana Specimens Examined*.—Six females, Kartabo, Bartica district: April 16, 1922; April 23, 1919; May 16, 1924; July 22, 1924; and July 23, 1922; two females, Kartabo, July-August, 1920 (W. M. Wheeler); female (2075), Moraballi creek, Essequibo river, September 14, 1929 (dark forest) (O. W. Richards); female (2553), Moraballi creek, Essequibo river, September 22, 1929; female, source Essequibo river (J. Ogilvie); female, Tumatumari, July, 1923 (F. X. Williams); female (514), Oko river, June 25, 1936 (N. A. Weber); female, August 14, 1911.

*Distribution*.—British Guiana, French Guiana and Amazonas, Brazil.

Closely related to *weyrauchi* Mickel from Peru.

#### TRAUMATOMUTILLA LATONA, new species

*Female*.—Holotype. Black, the second abdominal tergum maculated with a single pair of large, subquadrate, postmedian, red, integumental spots, and posterior margin of the second tergum with a median, pale pubescent spot. Length, 11 mm.

Head entirely black, very sparsely pubescent, that on the ventral aspect, the genae and the anterior half of front, pale glittering and semi-erect, elsewhere black; clypeal fringe fuscous; mandibles slender, edentate at the tip, apparently not toothed within; antennal tubercles contiguous; scape clothed with sparse, pale glittering hairs; first segment of flagellum distinctly longer than the second; flagellum black, suffused with reddish beneath; antennal scrobes distinctly carinate above, the carina not reaching the eye margins; front, vertex and genae with moderate, deep, contiguous to confluent punctures; postero-lateral angles of head, each with a small, triangular, glabrous tubercle; posterior margin of genae defined by a prominent, sharp carina, the latter extending anteriorly to the carina bounding the proboscital fossa; eyes very large, prominent, hemispherical, the least distance between the margin of the eyes and the genal carina equal to about one-sixth the greatest diameter of the eyes; ventral aspect of head glabrous, with small, sparse punctures.

Thorax black, the dorsum immaculate, clothed throughout with sparse, erect and semi-erect, black hairs; all the pleural areas, except sides of propodeum, with thick, appressed, fine, pale, glittering pubescence, and a few, sparse,



erect, pale, glittering hairs; sides and posterior face of propodeum with sparse, long, erect, pale glittering hairs; dorsum of thorax with moderately large, deep, contiguous to confluent punctures; scutellar scale present and distinct; lateral margins of mesonotal area not prominently dentate; lateral aspect of pronotum micropunctate and with a few, distinct punctures at the anterior margin; mesopleura micropunctate throughout and with moderate, shallow, close punctures at the posterior margin and postero-ventral area; metapleura micropunctate throughout and with scattered, shallow punctures ventrally; sides of propodeum rounded into the posterior face, with close to separated, moderate punctures; posterior face of propodeum with moderately large, deep, contiguous to confluent punctures.

Abdomen black, the second tergum maculated with a single pair of large, postmedian, subquadrate, red, integumental spots, the distance between the two equal to slightly more than one-third the transverse diameter of one of them; first segment distinctly nodose; anterior face of first tergum with moderate, close punctures posteriorly, clothed throughout with very sparse, long, erect, pale, glittering hairs, and with thick, appressed, pale, glittering pubescence at the posterior median margin; dorsal face of first tergum almost impunctate, but with a few, moderate, close punctures at the anterior margin, the median half clothed with dense, appressed, pale, glittering pubescence; second tergum with dense, confluent, elongate punctures, the latter becoming smaller and separated on the lateral areas; red, integumental spots of the second tergum with similar elongate punctures, but the latter distinct and separated slightly from one another; second tergum clothed with sparse, erect, black hairs, except the integumental spots with very sparse, erect, fulvous hairs; lateral areas of second tergum with very sparse, erect, pale, glittering hairs, the felt lines pale, the lateral margins with a fringe of appressed, pale, glittering hairs, the lateral thirds of the posterior margin with a pale fringe, and a broad spot of pale, glittering hairs medially on the posterior margin separated from the lateral, pale fringe by a cupreous to black fringe of hairs; third, fourth and fifth terga clothed with sparse, semi-erect, pale, glittering hairs interspersed with very sparse, erect, black hairs, each tergum with moderate, contiguous to confluent punctures; pygidial area long, narrow, triangular, occupying only the median area of last tergum, the area longitudinally rugose on the anterior two-thirds, glabrous, unsculptured on the posterior third; last tergum otherwise with contiguous to confluent punctures and

sparse, erect, pale, glittering hairs; first sternum glabrous, almost impunctate, with very sparse, erect, pale, glittering hairs, and with the longitudinal, median carina very weakly developed only on the anterior third; second sternum with small punctures near the anterior margin, but elsewhere with moderate, distinct, close punctures, clothed with very sparse, erect, fine, pale, glittering hairs, and with a thin, pale, posterior marginal fringe; sterna three to five with moderate, distinct, contiguous punctures, very sparse, erect, fine, pale, glittering hairs, and each with a thin, pale, posterior marginal fringe.

Legs black, sparsely clothed with pale, glittering hairs; calcaria pale.

*Holotype*.—Female, Bartica, Bartica district, British Guiana (Wm. Beebe), in collection of University of Minnesota.

*Paratypes*.—Female, Kartabo, Bartica district, British Guiana, May 20, 1919; female, Kartabo, Bartica district, British Guiana, April 14, 1922; female, British Guiana, without other data; female, Maracas, Trinidad, B. W. I., February 22, 1941 (D. J. Billes); female, Trinidad, B. W. I., May, no. 413 (D. Vesey-Fitzgerald); female, Port of Spain, Trinidad, B. W. I., January 30, 1912 (G. A. K. Marshall); female, Manaos, Brazil, August, 1929 (G. Arnold).

Related to *trochanterata* Gerstaecker from which it differs by the larger integumental spots of the second tergum, the absence of pale pubescence on the vertex, and the much less sculptured pygidial area (longitudinally rugose throughout in *trochanterata*). The integumental spots of the second tergum in *trochanterata* are separated by a distance equal to approximately four-fifths the transverse diameter of one of them. The paratypes range in length from 8 to 11 mm and the color of the legs varies from dark mahogany red to black.

#### TRAUMATOMUTILLA DIGNITOSA, new species

*Male*.—*Holotype*. Black, the pronotum, dorsum of propodeum, dorsal face of first tergum, band on anterior fourth of second tergum, posterior marginal fringe of second tergum interrupted medially with black, and third tergum entirely, all with dense, appressed, pale, glittering pubescence. Length, 14 mm.

Head black, the ventral aspect, genae, antennal tubercles, anterior margin of front and vertex, all with pale, glittering pubescence, thick, appressed and sparse, erect on the ventral aspect, genae, and antennal tubercles, sparse, appressed and erect on anterior part of front and on vertex; mandibles black, slightly reddish subterminally, edentate at the tip, and apparently with two small teeth within near the tip; clypeus with small, dense punctures throughout,

the anterior margin bidentate medially, clothed with sparse, fuscous pubescence; antennal tubercles contiguous; scape bicarinate beneath, clothed with black pubescence; first segment of flagellum only slightly shorter than the second; antennal scrobes strongly carinate above; front with moderate, close to separated punctures; vertex with small, close to separated punctures; genae with small punctures more or less concealed by the pubescence; postocellar area slightly elevated, the lateral posterior margins of the vertex therefore slightly concave.

Thorax black, the dorsal aspect of pronotum, dorsum of propodeum and mesopleura clothed with dense, appressed, pale, glittering pubescence, the lateral aspects of pronotum and the metapleura with sparse, appressed, pale, glittering pubescence, the posterior face of propodeum with sparse, appressed and erect, pale, glittering pubescence, the sides of propodeum with very sparse, erect, pale, glittering hairs, and the mesonotum and scutellum with sparse, black pubescence, except the lateral and posterior areas of scutellar elevation with sparse, erect, pale, glittering hairs; anterior face of pronotum not emarginate medially; dorsal aspect of pronotum densely punctate, but concealed by the pale pubescence; mesonotum with moderate, contiguous to confluent punctures; parapsidal furrows present on posterior two-thirds of mesonotum; lateral processes of scutellum densely punctate, obliquely truncate at the tip, two-fifths the length of the mesonotum on the median line; scutellum strongly, conically elevated, deeply reticulo-punctate, dorsum of propodeum broadly reticulo-punctate, but the sculpture concealed by the pubescence; posterior face of propodeum reticulate; lateral aspects of pronotum micropunctate and with a very few, small, scattered punctures; mesopleura coarsely reticulo-punctate, except the anterior marginal area less coarsely sculptured with shallow punctures; dorsal area of mesopleura elevated into a conspicuous, blunt tooth; metapleura glabrous, closely punctate ventrally; sides of propodeum reticulate, except the anterior marginal area glabrous, impunctate; tegulae black, clothed with sparse, black pubescence.

Abdomen black; first segment strongly nodose; anterior face of first tergum glabrous with scattered, small punctures and very sparse, erect, pale, glittering hairs; second tergum with fine, separated punctures throughout, the punctures slightly larger laterally and posteriorly than anteriorly; second tergum clothed with sparse, black pubescence, except a transverse band at the anterior margin of dense, appressed, pale, glittering pubescence, the width of the band at the midline about two-thirds the width of that

on the dorsal face of first tergum, the width at the sides slightly more than twice the width at the midline, thus the posterior margin of the band concave; felt lines pale; lateral margins of second tergum with a fringe of pale pubescence; posterior marginal fringe of second tergum pale, except interrupted medially with black; third tergum clothed throughout with thick, appressed, pale, glittering pubescence, and scattered, erect, black hairs, the posterior marginal fringe also pale and not interrupted medially; fourth, fifth, sixth and pygidial terga finely punctate and clothed with black pubescence, except the lateral margins of the fourth with a few, erect, pale hairs; pygidial area impunctate, except for small, close punctures at the posterior margin, the latter with a fringe of long, black hairs; first sternum moderately punctate, with very sparse, erect, pale hairs, and with a very weak, median, longitudinal carina; second sternum without a pubescent fovea, with small, sparse punctures, very sparse, erect and semi-erect, pale hairs, and with the posterior marginal fringe pale; third and fourth sterna with small, well separated punctures, very sparse, erect, pale hairs, and with the posterior marginal fringe pale; fifth sterna with small, sparse punctures, very sparse, erect, pale hairs and with the thin, posterior marginal fringe black; sixth sterna with small, sparse punctures, very sparse, erect, black hairs and a black, posterior marginal fringe; last sternum rectangular, longer than broad, with moderately small punctures laterally, the median, longitudinal area almost impunctate, clothed with very sparse, erect, black hairs.

Wings dark fuscous throughout; cell 2nd  $R_1 + R_2$  about three times as long as broad, squarely truncate at the tip; cell  $R_5$  receiving vein  $M_{3+4}$  about one-fourth the distance from the base to the tip; cell  $R_4$  very indistinct, receiving the indistinct vein  $M_2$  very close to the base.

Legs black, clothed with pale, glittering pubescence, except the tibiae externally with black pubescence, and the tarsi with fuscous to bronze pubescence; calcaria pale.

*Holotype*.—Male, Bartica, Bartica district, British Guiana (Wm. Beebe), in collection of University of Minnesota.

Related to *dentata* Smith from which it differs as expressed in the key.

#### TRAUMATOMUTILLA BARTICA, new species

*Male*.—*Holotype*. Black, the posterior half of dorsum of propodeum, anterior half of posterior face of propodeum, dorsal face of first tergum, and an anterior marginal band on the second tergum (the latter broad at the sides, equaling



half the length of the tergum and gradually narrowed toward the midline to one-fifth the length of the tergum), all with dense, appressed, pale, glittering pubescence; front, anterior margin of pronotum, pleural areas, and third and fourth terga entirely, all with sparse, appressed, pale, glittering pubescence; second sternum with a median, longitudinal line of appressed, pale pubescence passing through the pubescent fovea. Length, 15 mm.

Head black, clothed throughout with sparse, pale, glittering pubescence, except that on the malar space dense, and a transverse band anteriorly on the vertex with subappressed and erect, sparse, black hairs; mandibles edentate at the tip and apparently with a tooth within near the tip, the proximal half with thick, pale pubescence; clypeus finely, densely punctate, its anterior margin bidentate medially; antennal tubercles contiguous; scape bicarinate beneath; first segment of flagellum distinctly shorter than the second; antennal scrobes strongly carinate above; front and vertex with moderate, contiguous to confluent punctures; genae with small, contiguous punctures, more or less concealed by the pubescence; postocellar area slightly but distinctly elevated, the lateral posterior margin of the vertex therefore slightly concave.

Thorax black, the posterior half of dorsum of propodeum and anterior half of posterior face of propodeum with a large area of dense, appressed, pale, glittering pubescence; anterior margin of pronotum with appressed, pale pubescence; remainder of thorax with sparse, pale, glittering pubescence, except the most of pronotum, mesonotum entirely, and scutellum entirely, with sparse, black pubescence; anterior face of pronotum glabrous, distinctly, shallowly emarginate medially; dorsal face of pronotum, mesonotum entirely and scutellum with moderate, dense, confluent punctures; parapsidal furrows present on posterior half of mesonotum; lateral processes of scutellum densely punctate, their outer distal margin rounded; scutellum moderately convex, not conically elevated; dorsum and posterior face of propodeum reticulate; lateral aspects of pronotum micropunctate and with a few, moderate punctures anteriorly and dorsally; anterior fourth of mesopleura micropunctate, the remainder with moderate, dense, confluent punctures; mesopleura evenly convex, not elevated dorsally; metapleura very weakly micropunctate and micropubescent, and with a few, moderate, close punctures ventrally; sides of propodeum reticulate posteriorly, the reticulations becoming shallower anteriorly and almost obsolete at the anterior margin; tegulae black, glabrous, impunctate, except the anterior

and inner margins punctate and black pubescent.

Abdomen black with pale pubescent markings; first segment strongly nodose, the tergum with an anterior and dorsal face; a broad, posterior band of dense, appressed, pale, glittering pubescence covering the dorsal face entirely, except for a very narrow, median, nonpubescent line, and extending anteriorly on the lateral areas of the anterior face about one-third its length; first tergum with moderate punctures visible through the pale pubescence; second tergum with an anterior marginal band of dense, appressed, pale pubescence, broad at the sides (equal to half the length of the tergum) and gradually narrowed to the midline (equal to one-fifth the length of the tergum); second tergum otherwise black pubescent, except the felt lines, lateral margins, and lateral extremes of posterior margin pale; second tergum with fine and small punctures intermixed; third tergum clothed throughout with sparse, appressed, pale pubescence, except the posterior marginal fringe black; fourth tergum clothed with sparse, appressed, pale pubescence somewhat interrupted medially with black, and the posterior marginal fringe black; fifth, sixth and last terga black pubescent, except the fifth and sixth with some pale pubescence at the lateral margins; pygidial area finely granulate; first sternum with a low, median, longitudinal carina and very sparsely clothed with erect, pale hairs; second sternum with moderate, well separated punctures, a moderately large, postmedian, pale pubescent fovea, a median, longitudinal line of appressed, pale pubescence passing through the fovea, and with sparse, pale pubescence; postero-lateral areas of second sternum with fine punctures interspersed among the moderate ones; posterior marginal fringe of sixth sternum and sparse pubescence of last sternum, black.

Wings dark fuscous; cell 2nd  $R_1 + R_2$  acute at the tip; cell  $R_5$  receiving vein  $M_{3+4}$  one-fourth the distance from the base to the tip; cell  $R_4$  receiving vein  $M_2$  at the extreme tip.

Legs black, clothed throughout with sparse, pale pubescence, except the tips of the middle and hind femora, and the extreme base of the middle and hind tibiae, black pubescent.

*Holotype*.—Male, Kartabo, Bartica district, British Guiana, March 10, 1922 (Wm. Beebe), in collection of University of Minnesota.

Related to *picada* Cresson, but differs in the mostly black pubescent pronotum, the posterior marginal fringe of the second tergum black, the third and fourth terga only sparsely, pale pubescent, and the median, longitudinal, pale pubescent line of the second sternum.

## TRAUMATOMUTILLA DUBIA DUBIA (Fabricius)

1804. *Mutilla dubia* Fabricius, Syst. Piez., p. 435, gynandromorph.
1879. *Mutilla midas* Smith, Descr. New Species Hymen., p. 221, male.
1912. *Traumatomutilla nitidipustulata* Cameron, Timehri: Journ. Roy. Agri. Com. Soc. Brit. Guiana, (3), vol. 2, p. 415, female.
1931. *Traumatomutilla dubia* Bischoff, Mitt. D. Ent. Ges., Jahrg. 2, pp. 54-56, gynandromorph type.
1931. *Traumatomutilla nitidipustulata* Bischoff, Mitt. D. Ent. Ges., Jahrg. 2, p. 55, female.

Type.—*dubia* Fabricius, Zoologisches Museum der Universität, Kopenhagen, Denmark.  
*midas* Smith, British Museum (Nat. Hist.).

*nitidipustulata* Cameron, British Museum (Nat. Hist.).

Distribution.—British Guiana, Brazil.

British Guiana Specimens Examined.—Female, Rockstone, Essequibo river, March 23, 1913 (G. E. Bodkin); female, Rockstone, June 2, 1929 (A. Mackie); two females, Rockstone, July 9, 1911; seven females, Rockstone, Essequibo river, June 26, 1927; female, Rockstone, November 30, 1913 (G. E. Bodkin); female, Essequibo (Smidt).

Dr. H. Bischoff, Zoological Museum, University of Berlin, and the writer examined Fabricius's type of *dubia* in 1931 with the above results. It was determined from the gynandromorph type that the male must be the same as *midas* Smith and that the female was one of the group of subspecies including *spilota* Gerstaecker (Surinam), *albata* Smith (Ega), *simulans* Smith (Venezuela), and *nitidipustulata* (Cameron) (British Guiana). The Fabrician type bears the locality designation "Essequibo river." The above thirteen specimens are all from the Essequibo river and are the same as *nitidipustulata* Cameron, with the type of which two of them have been compared. Three specimens, noted hereafter, from Essequibo river are the same as *spilota* Gerstaecker. However, the typical subspecies of female must be chosen from the same type locality as the male and since the type locality of *spilota* is Surinam, it is excluded from consideration.

Only one specimen of male is known to me. It is from Vista Alegre, Rio Branco, Amazonas, Brazil, September 6, 1924. *Midas* Smith has for type locality, Para, Brazil. Without more material it is impossible to distinguish subspecies in the males. If material of the male sex from Para,

Vista Alegre, Essequibo river and other localities should prove to represent recognizable subspecies, then the Para specimens and those consubspecific with them will have to be designated as *midas* Smith.

## TRAUMATOMUTILLA DUBIA SPILOTA (Gerstaecker)

1874. *Mutilla spilota* Gerstaecker, Arch. f. Naturg., vol. 40, p. 73, female.

Lectotype.—Female, no. 6689, Surinam (Cordua), in Zoologisches Museum der Universität, Berlin.

Distribution.—Surinam, British Guiana, Amazonas.

British Guiana Specimens Examined.—Female, Rockstone, Essequibo river, June 26, 1927; female, Rio Essequibo (Source) (J. Ogilvie); female, Ikuraka Lake, Essequibo, March, 1918 (G. E. Bodkin); female 1523, Rukununi savanna, Jan. 12, 1933 (D. Vesey-Fitzgerald).

The above Rockstone specimen was collected at the same time and place as seven specimens of *dubia dubia* (Fabricius).

Gerstaecker had four specimens, all labeled the same, from which he described this species. The writer labeled one of these a lectotype, and the remaining three as paratypes in 1931.

## Genus HOPLMUTILLA Ashmead

## KEY TO THE FEMALES

1. Carinae of second tergum entirely absent on the integumental spots, the latter sometimes sparsely punctured; mesonotum with only antero-lateral spots of dense, pale pubescence, never with a transverse, posterior, pale pubescent spot between the antero-lateral spots. . . . . 2
- Carinae of second tergum present on the integumental spots, although sometimes reduced to tubercular elevations; mesonotum usually with a more or less well developed transverse spot of pale pubescence between and posterior to the antero-lateral spots . . . . . 3
2. Vertex with a pair of pale pubescent spots . . . . . *lanata* (Lepeletier)
- Vertex entirely black pubescent . . . . . *atricapilla* Mickel
3. Genae clothed for the most part with very sparse, black pubescence, sometimes a few pale hairs at the posterior margin. . . . . 4
- Genae clothed for the most part with very sparse, pale pubescence; integumental spots of second tergum ferruginous; distal spine of hind tibiae at the tip of a cylindrical process, the spine and the process equal in length. . . . . *derasa* (Fabricius)
4. Sides of propodeum entirely glabrous, almost impunctate, with only a few, scat-



tered, inconspicuous punctures; only the dorsal third of lateral aspect of pronotum punctate, the remainder glabrous, impunctate; broad, lateral margins of first tergum bare, glabrous, impunctate  
*glabella* Mickel

Sides of propodeum distinctly, closely punctate posteriorly; lateral aspects of pronotum punctate throughout; lateral margins of first tergum pubescent, punctate ..... *bequaerti* Mickel

#### HOPLOMUTILLA LANATA (Lepeletier)

1845. *Mutilla lanata* Lepeletier, Hist. Nat. Ins., Hymén., vol. 3, p. 644, female.

1939. *Hoplomutilla lanata* Mickel, Rev. Ent., Rio, vol. 10, p. 647, female.

Three females have been recorded from British Guiana: Bon Successo, Rio Takatu, Rupununi Savanna, January 1-2, 1933 (D. Vesey-Fitzgerald).

*Distribution*.—Northern Brazil, British Guiana and Venezuela.

#### HOPLOMUTILLA ATRICAPILLA Mickel

1939. *Hoplomutilla atricapilla* Mickel, Rev. Ent., Rio, vol. 10, p. 648, female.

Known only from the unique type. Type locality label "British Guiana."

#### HOPLOMUTILLA GLABELLA Mickel

1939. *Hoplomutilla glabella* Mickel, Rev. Ent., Rio, vol. 10, p. 655, female.

Recorded from British Guiana: Rio Essequibo (source) (J. Ogilvie).

*Distribution*.—Brazil, Amazon river region and British Guiana as above.

#### HOPLOMUTILLA BEQUAERTI Mickel

1939. *Hoplomutilla bequaerti* Mickel, Rev. Ent., Rio, vol. 10, p. 665, female.

Recorded from British Guiana.—Blairmont, 1923 (H. E. Box).

*Distribution*.—Colombia, British Guiana (as above), Surinam, French Guiana and Amazonas, Brazil.

#### HOPLOMUTILLA DERASA (Fabricius)

1805. *Mutilla derasa* Fabricius, Syst. Piez., p. 429, female.

1939. *Hoplomutilla derasa* Mickel, Rev. Ent., Rio, vol. 10, p. 685, female.

*British Guiana Specimens Examined*.—Thirteen females, Kartabo, Bartica district: March 23, 1922; April 13, 1924; April 28, 1924; May 15, 1922; May 23, 1922; May 26, 1922; June 22, 1924; July 24, 1920; August 27, 1922; November 5, 1922; and 1919; three females, Penal

Settlement, Bartica district, May 6, 1924, and without date; female, Kalacoon, Bartica district, 1916.

*Distribution*.—British Guiana, French Guiana, Surinam and northern Brazil.

#### HOPLOMUTILLA CAERULEA Mickel

1939. *Hoplomutilla caerulea* Mickel, Rev. Ent., Rio, vol. 10, p. 707, male.

Recorded from British Guiana: Thirteen males (including holotype), Kamakusa, January, 1923.

*Distribution*.—Known only from type locality.

#### Genus PAPPOGNATHA Mickel

##### PAPPOGNATHA RADIATA (André)

1906. *Ephuta (Tilluma) radiata* André, Zeit. Hymen. Dipt., vol. 6, p. 35, female.

1939. *Pappognatha radiata* Mickel, Ann. Ent. Soc. Amer., vol. 32, p. 339, female.

Recorded from British Guiana: Moraballi creek and Essequibo river.

*British Guiana Specimens Examined*.—Three females, Kartabo, Bartica district: May 8, 1924; May 30, 1919; and June 16, 1919; two females, Bartica district, April 23 and April 24, 1924.

*Distribution*.—French Guiana and British Guiana.

#### Genus HOPLOCRACTES Mickel

##### KEY TO THE FEMALES

1. Median, pale pubescent spot of second abdominal tergum fulvous, more or less elongate, subovate. *centromaculata* (Cresson)

Median, pale pubescent spot of second abdominal tergum pale, glittering white, linear ..... *pompalis* Mickel

#### HOPLOCRACTES CENTROMACULATA (Cresson)

1902. *Mutilla centromaculata* Cresson, Trans. Amer. Ent. Soc., vol. 28, p. 27, female.

1941. *Hoplocrates centromaculata* Mickel, Rev. Ent., Rio, vol. 12, p. 369, female.

Recorded from British Guiana: Georgetown, July, 1921 (A. Busck).

*British Guiana Specimens Examined*.—Three females, Kartabo, Bartica district: February 26, 1922; March 12, 1922; and June 4, 1919.

*Distribution*.—Brazil, French Guiana, British Guiana, Venezuela and Peru.

#### HOPLOCRACTES POMPALIS Mickel

1941. *Hoplocrates pompalis* Mickel, Rev. Ent., Rio, vol. 12, p. 378, female.

Not recorded from British Guiana, but probably occurs there.

*Distribution*.—Colombia, Venezuela, Trinidad, B. W. I., and Surinam.

## Genus PSEUDOMETHOCA Ashmead

## KEY TO THE FEMALES

1. Abdomen above with a narrow, median line of pale, glittering pubescence extending from first to last segments; second abdominal tergum with a postmedian, transverse, narrow line of pale, glittering pubescence; thus the abdomen with the pale pubescent markings forming a cross ..... 2  
 Abdomen without such pale, glittering pubescent markings, the latter not in the form of a cross ..... 4
2. Head entirely black; legs ferruginous; integument ferruginous beneath transverse, pale pubescent line on second tergum (Colombia) ..... *cruciatella* Mickel  
 Front and anterior part of vertex bright ferruginous; legs black; integument of second tergum entirely black throughout ..... 3
3. Dorsum and pleural regions of thorax entirely ferruginous (British Guiana)  
*virgata*, n. sp.  
 At least mesopleura and metapleura largely black (Venezuela, Trinidad, French Guiana) ..... *plagiata* (Gerstaecker)
4. Integumental, ferruginous, transverse markings of second tergum confluent medially forming a postmedian transverse band; pygidium granulate ..... 5  
 Integumental, ferruginous, transverse markings of second tergum well separated spots; pygidium either granulate or glabrous ..... 6
5. Clypeus, antennal tubercles black; legs ferruginous with the tips of femora black; length 6.5 to 10 mm. (British Guiana) ..... *pulchella*, n. sp.  
 Clypeus and antennal tubercles ferruginous; legs black, the tibiae and tarsi obscure ferruginous; length, 4 mm. (Aragua, Venezuela) .... *pulicaria* (Gerstaecker)
6. Pygidium granulate; lateral margins of dorsum of propodeum with a conspicuous tubercle immediately behind the propodeal spiracle; integumental spots beneath a complete, transverse band of pale pubescence (Para, Brazil)  
*crepera* (Cresson)  
 Pygidium glabrous; dorsum of propodeum not conspicuously tuberculate; second tergum without a complete, transverse, postmedian band of pale pubescence (British Guiana) ..... *diligibilis*, n. sp.

PSEUDOMETHOCA PLAGIATA (Gerstaecker),  
(new combination)

1874. *Mutilla plagiata* Gerstaecker, Arch. f. Naturg., vol. 40, p. 65, female.

1879. *Mutilla crenulata* Smith, New Descr. Hymen., p. 211, female. (New synonymy).

*Types*.—*plagiata* Gerstaecker, female, no. 6626, Aragua (Moritz) in Zoological Museum of University of Berlin, Germany. Gerstaecker gives the locality in his description as "Aragua Columbae." The specimen was collected by Moritz, and the records of the Berlin Museum show that Moritz collected in South America before 1829 when the country now known as Venezuela was a part of Colombia. The type locality, then, is Aragua, Venezuela.

Type of *crenulata*: Female, Venezuela, in British Museum of Natural History.

Both types have been examined and found to be the same.

*Distribution*.—Venezuela, Trinidad, B. W. I., and French Guiana.

Not recorded from British Guiana but will probably be found there.

## PSEUDOMETHOCA VIRGATA, new species

*Female*.—Holotype. Front, anterior part of vertex, genae in part, and thorax entirely, ferruginous; abdomen black, with a median, narrow line of pale, glittering pubescence extending from the first segment to the last, and a transverse, postmedian line of pale, glittering pubescence on the second tergum, thus the narrow, pale pubescent markings forming a cross; pygidial area well defined, granulate; legs black. Length, 9 mm.

Head black, except the front, anterior part of vertex, and genae in part, bright ferruginous, the genae not so brightly ferruginous as the front and vertex; genae, clypeus and scape, clothed with sparse, pale hairs; ferruginous area of front and vertex with sparse, recumbent, bright ferruginous hairs; black area of vertex with sparse, black hairs; scape and flagellum black; front and vertex with moderate, dense punctures; genae with moderate, close punctures; anterior half of clypeus glabrous, transversely concave, the posterior half finely, densely punctate, the margin separating the two halves produced laterally into a small tubercle; posterior margin of genae carinate, the carina not extending on to the vertex, not elevated anteriorly into a tooth and not reaching the carina margining the proboscidal fovea; first segment of flagellum almost as long as the second and third united; antennal scrobes distinctly carinate above; head slightly narrower than the thorax.

Thorax entirely ferruginous; dorsum of thorax with moderate, dense punctures anteriorly, the punctures increasing in size posteriorly and



merging into reticulate on the dorsum and posterior face of propodeum; scutellar scale absent; lateral areas of pronotum with moderate, dense punctures; mesopleura micropunctate anterior to the sharp pleural ridge, and glabrous, impunctate posterior to the latter; metapleura and sides of propodeum glabrous, impunctate; anterior half of posterior face of propodeum reticulate, the posterior half glabrous, with only a few scattered punctures; dorsum of pronotum with sparse, black hairs; remainder of dorsum of thorax with sparse, bright ferruginous hairs; lateral areas of pronotum, mesopleura anterior to pleural ridge, ventral margin of metapleura, and postero-ventral area of sides of propodeum, all with pale, micropubesence; posterior face of propodeum with an elongate area of long, erect, thick, pale hairs at the lateral margins medially; humeral angles angulate but not dentate; lateral margins of dorsum of thorax with a distinct tooth midway between the anterior and propodeal spiracles; anterior margin of propodeal spiracles produced; lateral margins of dorsum and posterior face of propodeum serrate.

Abdomen entirely black, the terga clothed with sparse, recumbent, black pubescence and a few, erect, black hairs, except as follows: a median spot at the posterior margin of first tergum, a median narrow line the entire length of the second tergum, and a median spot on terga three to five, all forming a longitudinal, median line, a transverse, postmedian line on the second tergum, lateral fifths of first and second terga forming an obscure, longitudinal stripe, and lateral spots on terga three to five, all of pale, glittering pubescence; the lateral fifths of the second terga not uniformly pale pubescent throughout, but sparse, except at the inner and outer margins where the pubescence is dense, thus forming the above obscure, lateral stripes; sterna clothed throughout with sparse, pale hairs, the latter slightly thicker at the posterior margins of the sterna; all the terga finely, densely punctate; pygidial area occupying most of the last tergum, distinctly margined laterally, strongly granulate throughout; first sternum with a low, poorly developed, median, longitudinal carina; second sternum with moderate, contiguous to separated punctures; remaining sterna with small, close punctures.

Legs black, except all the coxae distinctly ferruginous; legs clothed throughout with sparse, pale hairs; calcaria pale.

*Holotype*.—Female, Rupununi savanna, British Guiana, October 2, 1932 (D. Vesey-Fitzgerald), in collection of University of Minnesota.

Related to *plagiata* Gerstaecker, but differs

from that species in the entirely ferruginous thorax, the partly ferruginous genae, the partly ferruginous vertex, and the ferruginous coxae.

#### PSEUDOMETHOCA DILIGIBILIS, new species

*Female*.—Holotype. Head and abdomen mostly black; thorax and legs bright ferruginous; first abdominal segment sessile with the second; second tergum with a pair of postmedian, transverse, integumental, ferruginous spots distinctly separated medially; posterior marginal fringe of second tergum black; terga three to five clothed with sparse, pale pubescence; pygidium glabrous, impunctate, distinctly margined laterally. Length, 6 mm.

Head black, except mandibles, excluding tips, clypeus, antennal tubercles, scape, pedicel and first three or four segments of flagellum, bright ferruginous, under side of head very dark ferruginous; genal carina present and distinct, but not terminating anteriorly in a tooth and not extending on to the postero-lateral angles; mandibles edentate at the tip, their inner margins not dentate; elevated, median area of clypeus with a small tubercle at each antero-lateral angle, a narrow rectangular area between the tubercles glabrous, the subtriangular area posterior to the latter, finely, densely punctate; antennal scrobes carinate above; front, vertex and genae with moderate, dense punctures and sparse, erect and recumbent, pale hairs; eyes large, the distance between the posterior margin of eyes and the postero-lateral angles about one-third the greatest diameter of the eyes.

Thorax entirely bright ferruginous, subpyriform, somewhat constricted at the propodeal spiracles; dorsum of thorax, including sides of pronotum with moderate, dense punctures anteriorly, the punctures becoming progressively larger posteriorly and merging into reticulate on the dorsum and posterior face of propodeum; mesopleura glabrous and micropunctate; metapleura and sides of propodeum glabrous, mostly impunctate; lateral margins of dorsum of thorax with two small teeth each side between the anterior and propodeal spiracles; lateral margins of dorsum and posterior face of propodeum serrate; dorsum of thorax clothed with recumbent, ferruginous hairs and erect, pale hairs; pleural areas of thorax with inconspicuous, pale micropubesence, more evident on the mesopleura than elsewhere; metasternal process short, extending between the hind coxae anteriorly but not over them, acute at the tip.

Abdomen black, except the first segment, the posterior margins of the third, fourth and fifth terga, the last segment, the second sternum, the posterior margins of the fourth and fifth sterna, and a pair of postmedian, transverse, integu-

mental spots well separated at the midline on the second tergum, all ferruginous; integumental spots of second tergum extending to the lateral margins of tergum and then produced posteriorly to the posterior margin; first tergum with a median, posterior darkened area, finely, closely punctate, the posterior third interspersed with moderate, setiferous punctures, each bearing a long, pale hair; second tergum with moderate, dense punctures throughout, with sparse, recumbent, dark pubescence, except at the sides and on the integumental ferruginous spots, the sparse pubescence pale; posterior marginal fringe of second tergum black throughout; third to fifth terga with small, dense punctures, clothed with sparse, erect and recumbent pale pubescence; pygidial area well defined, glabrous, the remainder of the pygidial tergum with small, close punctures, and sparse, erect, pale hairs; median, longitudinal carina of first sternum well developed; second sternum with moderate, distinct punctures and sparse, pale hairs; remaining sterna with small, close punctures and sparse, pale hairs.

Legs entirely bright ferruginous, calcaria pale.

*Holotype*.—Female, Blairmont, British Guiana, September, 1923 (F. X. Williams), in collection of University of Minnesota.

*Paratypes*.—Female, Blairmont, British Guiana, September, 1923 (F. X. Williams); female Blairmont, British Guiana, October, 1923 (F. X. Williams); female, Blairmont, British Guiana, 1923-24 (H. E. Box) (135); female, Blairmont, British Guiana, August, 1923 (135); female, Blairmont, British Guiana, October 1, 1923; female, New Amsterdam, British Guiana, August, 1923 (F. X. Williams).

Similar in appearance to *puchella*, but is smaller, the paired integumental spots of the second tergum well separated, not confluent, and the pygidium glabrous, not granulate. The paratypes vary in length from 4 to 6 mm.

*PSEUDOMETHOCA PUCHELLA*, new species

*Female*.—*Holotype*. Head black, clothed with moderately thin, pale golden pubescence, the proximal two-thirds of mandibles, and the scape and flagellum entirely, ferruginous; thorax entirely ferruginous; abdomen black, except the first segment largely ferruginous, and the second with a transverse, slightly postmedian, integumental ferruginous band slightly constricted at the middle; posterior marginal fringe of first tergum, ferruginous integumental band of second tergum and terga three to five entirely, with very pale golden pubescence; legs ferruginous, except the tips of the femora blackish, and the tibiae and tarsi darker ferruginous than the femora. Length, 10 mm.

Head black, the proximal two-thirds of mandibles, and the scape and flagellum entirely, ferruginous; head clothed throughout with moderately thin, semi-appressed, pale golden pubescence, not obscuring the black integumental color; mandibles apparently edentate at the tip and with a small tooth within near the tip; median area of clypeus a broad, low triangle with the anterior margin as its base, the two sides defined by a distinct carina, and each carina terminating at the anterior margin in a small tooth; antennal tubercles approximate at their base, glabrous; first segment of flagellum equal to or slightly shorter than segments two and three united; antennal scrobes distinctly carinate above; front, vertex and genae with small, dense, contiguous to confluent punctures; posterior margin of genae defined by a distinct carina terminating anteriorly at the carina bounding the proboscidal fossa and posteriorly on the postero-lateral angles of head; ventral surface of head with small distinct, separated punctures.

Thorax ferruginous, the pronotal and propodeal areas with sparse, inconspicuous, pale hairs, the mesonotal area with sparse, black hairs; thorax distinctly longer than broad, violin shaped, narrowest at the propodeal spiracular tubercles; pronotal and mesonotal areas with small, dense, contiguous to confluent punctures, the latter becoming larger on the posterior half of mesonotal area and merging into the distinct reticulations of the dorsum and posterior face of propodeum; lateral margins of dorsum of thorax denticulate, i. e., a small tooth just posterior to the anterior spiracles, a second small tooth midway between the first and the propodeal tubercles, the latter subdentate, and the lateral margins of the posterior face of propodeum with a series of short, small teeth; lateral margins of dorsum of propodeum without a prominent tubercle immediately behind the propodeal spiracle; scutellar scale absent; posterior face of propodeum joining the dorsal face at an obtuse angle, not perpendicular; lateral aspect of pronotum with small, close, distinct punctures; remainder of pleural areas glabrous, impunctate, but clothed with sparse, appressed, fine, inconspicuous, pale pubescence.

Abdomen black, except the first segment (excluding the posterior margin of the tergum) and a slightly postmedian integumental band slightly constricted medially on the second tergum, ferruginous; first tergum with the narrow, posterior margin black, clothed with sparse, erect, pale hairs and a posterior marginal fringe of pale golden hairs; greatest width of transverse, ferruginous, integumental band of second tergum approximately one-third the length of the second tergum on the midline, its width



gradually narrowing towards the lateral margins of the tergum, and the ferruginous color extending anteriorly along the narrow lateral margin of the tergum almost to, but not reaching the anterior margin; second tergum with small, dense, contiguous to confluent punctures throughout, clothed with sparse, black pubescence and the apical fringe black, except the ferruginous, transverse band and lateral fifths with sparse, very pale golden pubescence; terga three to five with small, dense, contiguous to confluent punctures, clothed throughout with very pale golden pubescence; pygidial area well defined, granulate; first sternum with small, distinct punctures, and a uniform, median, longitudinal carina; second sternum suffused with ferruginous on median anterior area, with small, close, sometimes contiguous and confluent punctures throughout, and clothed with sparse, pale hairs; sterna three to five with small, dense, contiguous to confluent punctures and clothed with sparse, pale hairs; last sternum with small, distinct punctures, and with erect, very pale golden hairs.

Legs ferruginous, except the tips of the femora blackish, and the tibiae and tarsi a distinctly darker ferruginous than the femora, clothed throughout with sparse, very pale golden pubescence; calcaria pale.

*Holotype*.—Female, Kartabo, Bartica district, British Guiana, August 13, 1920 (Wm. Beebe), in University of Minnesota collection.

*Paratypes*.—Two females, Kartabo, Bartica, district, British Guiana, August 13, 1920 and June 9, 1924 (Wm. Beebe); female, Tropical Research Station, N. Y. Zool. Soc., British Guiana, no. 21252; female, Kurupukari, R. Essequibo, British Guiana, January 15, 1933 (D. Vesey-Fitzgerald).

Apparently related to *pulicaria* Gerstaecker, which is smaller (length, 4 mm), has the legs black, and the clypeus and antennal tubercles ferruginous. The specimen from Kurupukari differs slightly in that the transverse band of the second tergum is reduced to two large transverse spots, narrowly separated medially by a black line, and which are widely separated laterally from the ferruginous color of the lateral tergal margins, and also in the reduced amount of ferruginous on the first abdominal segment. The paratypes vary in length from 6.5 mm to 10 mm.

#### Genus CALOMUTILLA, new genus

*Genotype*.—*Mutilla temporalis* Gerstaecker.

*Generic Characters*.—Female; head large, subquadrate, the distance between the posterior margin of the eyes and the postero-lateral angles of head distinctly greater than the greatest di-

ameter of the eyes; proboscidal fossa small, subtriangular, not extending laterad to the insertion of the mandibles; genal carina extending almost to insertion of mandibles, not connected with the proboscidal fossa by a transverse carina, extending posteriorly on to the vertex; mandibles slender, slightly sinuate, i. e., curved slightly ventrad beyond the middle, edentate at the tip, and with a small, distinct, obtuse tooth within near the base; anterior margin of clypeus with a tooth anterior to and slightly laterad of the insertion of the antennae; first segment of flagellum distinctly longer than the length of the second and third segments combined; antennal scrobes strongly carinate above; eyes hemispherical, glabrous.

Thorax subpyriform, constricted at the propodeal spiracles; lateral margins of dorsum of thorax denticulate or dentate, two small teeth or tubercles between the anterior and propodeal spiracles and the lateral margins of dorsum and posterior face of propodeum with six or seven small teeth; mesosternal lamellate process between and above hind coxae rounded at the tip; scutellar scale absent.

First abdominal segment entirely sessile with the second; antero-lateral areas of second tergum not elevated and without parallel, short, interrupted carinae; no definite pygidial area present, the posterior third or half of the tergum glabrous.

External, distal spine of hind tibiae inserted on a conical or cylindrical process; calcaria pale.

Male unknown.

The genus includes in addition to the genotype: *crucigera* Burmeister, *cruciata* Smith and *williamsi*, n. sp.

#### KEY TO THE FEMALES

1. Elevated median area of clypeus distinctly trituberculate; genal carina terminating anteriorly in a distinct elevation. . . . . 2
- Elevated median area of clypeus distinctly bituberculate; genal carina terminating anteriorly without an elevation (Novo Friburgo, Brazil)  
*crucigera* (Burmeister)
2. Second abdominal tergum with a complete, postmedian, transverse band of pale pubescence . . . . . 3
- Second abdominal tergum without a transverse band of pale pubescence, but with three postmedian spots (one median and two lateral) of pale pubescence (S. Joao del Rey, Brazil).  
*temporalis* (Gerstaecker)
3. Head mostly ferruginous; integument beneath postmedian, pubescent band of second tergite ferruginous (Para, Brazil) . . . . . *cruciata* (Smith)

Head black; integument beneath postmedian pubescent band of second tergum black (British Guiana). *williamsi*, n. sp.

*CALOMUTILLA WILLIAMSII*, new species

*Female*.—Holotype. Head and abdomen black, thorax ferruginous; antennae, mandibles and legs mahogany red; genal carina terminating anteriorly in a small, but distinct, rounded elevation; light pubescent markings of abdominal segments cruciate, the vertical bar interrupted just anterior to the cross bar; external, distal spine of hind tibiae inserted on a cylindrical process. Length, 7 mm.

Head quadrate, black (very dark mahogany red when viewed through binocular with microscope light), sparsely clothed with recumbent, pale pubescence and erect, dark hairs; median elevated area of clypeus trituberculate, the small tubercles in a transverse line; front, vertex and genae finely, densely punctate; ventral aspect of head with fine, sparse, shallow punctures; genal carina high, sharp, terminating anteriorly in a rounded elevation.

Thorax bright ferruginous; dorsum finely, densely punctate; posterior face of propodeum reticulate; lateral aspect of pronotum with fine, shallow, close punctures; mesopleura glabrous, with a line of vertical punctures along the posterior margin; metapleura and sides of propodeum glabrous; dorsum and posterior face of propodeum with sparse, dark, erect hairs; pleural areas with sparse, recumbent, pale pubescence; lateral margins of thoracic notum and of posterior face of propodeum, denticulate.

Abdomen black, clothed with sparse, erect black hairs and recumbent black pubescence, except first tergum and broad lateral margins of terga two to five with sparse, recumbent and erect, pale pubescence, and a cruciate mark of recumbent, pale pubescence on terga one to five, the vertical bar of the cross made up of a median spot on the margin of tergum one, a narrow, elongate, median mark on the anterior third of tergum two, a median posterior extension to the posterior margin of the transverse bar on tergum two, and median spots on terga three to five, the transverse bar on the second tergum postmedian in position, thus the cruciate pale mark strongly interrupted just anterior to the transverse bar; first tergum with sparse, small to fine punctures; second tergum with small, close punctures, very minutely, shallowly punctate between the punctures, the area behind the transverse pale band less strongly punctured than that anterior to it; terga three to five finely, shallowly, closely punctate; last tergum without a definite pygidial area, the anterior  $\frac{2}{3}$  finely punctate, posterior  $\frac{1}{3}$  glabrous, impunctate.

*Holotype*.—Female, Blairmont, British Guiana, October, 1923 (F. X. Williams), in collection of University of Minnesota.

Genus *PERTYELLA*, new genus

*Genotype*.—*Mutilla investigatrix* Smith.

*Generic Characters*.—Female; head large, subquadrate, the distance between posterior margin of eyes and postero-lateral angles of head about equal to the greatest diameter of the eyes; proboscidal fossa small, subtriangular, not extending to insertion of mandibles; genal carina terminating anteriorly before the insertion of the mandibles, not connected with the proboscidal fossa by a transverse carina, extending posteriorly on to the vertex; proximal two-thirds of mandibles broad, then narrowed, forming a conspicuous tooth on the inner margin (visible with the mandibles closed), the distal third slender and attenuated to the edentate tip; anterior margin of clypeus sometimes weakly tuberculate, but not dentate anterior to and laterad of the insertion of the antennae; first segment of flagellum distinctly longer than segments two and three combined; antennal scrobes carinate above; eyes hemispherical, glabrous.

Thorax subpyriform, strongly constricted at the propodeal spiracles; lateral margins of the dorsum of thorax strongly dentate, two teeth between the anterior and propodeal spiracles, four to five teeth on lateral margins of dorsum and posterior face of propodeum; anterior margin of dorsum of pronotum carinate laterally, the carina extending up on to the humeral angles, but almost absent between the humeral angles; lamellate process of mesosternum extending above and between the posterior coxae, the process broadly rounded at the tip; scutellar scale absent.

First abdominal segment entirely sessile or subsessile with the second; antero-lateral areas of second tergum slightly elevated and with short, parallel, interrupted carinae, the latter inconspicuous and almost obsolete in some species; no definite pygidial area present, the posterior third or half of the last tergum glabrous.

External, distal spine of hind tibiae inserted on a conical or cylindrical process. Calcaria pale.

Male unknown.

The genus includes in addition to the genotype: *inimica* Cameron, *salutatrix salutatrix* Smith, *salutatrix euryclea* Cameron, *holmbergi* E. Lynch-Arribalzaga, and *decora*, n. sp.

KEY TO THE FEMALES

1. Fourth abdominal tergum clothed entirely with pale pubescence. . . . . 2



- Fourth abdominal tergum with only a median or linear quadrate spot of pale pubescence ..... 3
2. Thorax bright ferruginous (Mexico)  
*salutatrix salutatrix* (Smith)  
 Thorax very dark mahogany red, almost black (Mexico)  
*salutatrix euryclea* (Cameron)
3. Median, longitudinal, pale pubescent line of second tergum complete ..... 4  
 Median, longitudinal, pale pubescent line of second tergum incomplete ..... 5
4. Thorax and legs bright ferruginous, concolorous (Panama) ..... *inimica* (Cameron)  
 Thorax bright ferruginous, legs dark ferruginous, blackish (Venezuela; Trinidad) ..... *decora*, n. sp.
5. Head and abdomen black; second tergum with a complete, transverse, postmedian, pale pubescent band (Ega, Brazil)  
*investigatrix* (Smith)  
 Entirely ferruginous, except the terminal abdominal segments infuscated; second tergum without a transverse, postmedian, pale pubescent band (Argentina)  
*holmbergi* (E. Lynch-Arribalzaga)

#### PERTYELLA DECORA, new species

*Female*.—Holotype. Head, abdomen and legs black, the dorsum and upper parts of the sides of the thorax bright ferruginous, the venter and lower parts of the sides of the thorax blackish; vertex and front with a pair of broad, lateral stripes adjacent to the eyes, the stripes bent inwardly both anteriorly and posteriorly and confluent at the midline, thus forming a circle; anterior portions of stripes not as conspicuous as elsewhere; abdomen marked with three narrow, longitudinal stripes of dense, appressed, pale pubescence, one stripe at each lateral margin and one at the midline, and a narrow, postmedian, transverse stripe of similar pubescence on the second tergum intersecting the median, longitudinal stripe and joining the two lateral longitudinal stripes. Length, 9 mm.

Head black, except the mandibles and the flagellar segments beneath, dark ferruginous; genal carina high, thin and lamellate, obtusely angulate at its anterior termination, rectangulate and prominent at the postero-lateral angles; head clothed throughout with sparse, pale pubescence, except for the lateral stripes on front and vertex as described above, and the circular area enclosed by the stripes with dark, sparse pubescence; ventral aspect of head between the genal carinae weakly, transversely rugose and with scattered, fine punctures; median area of clypeus obscurely punctate, the anterior and

posterior margins slightly raised; front vertex and genae with moderate, dense, confluent punctures.

Thorax bright ferruginous, except the venter, ventral third of mesopleura and ventral half of metapleura blackish; pleural areas glabrous, micropunctate, clothed with sparse, short, pale micropubescence, except a row of moderate punctures adjacent to the posterior margin of the mesopleura, each with a long, pale hair, and scattered, moderate punctures on the lateral aspects of the pronotum; dorsum of thorax with moderate, dense, confluent punctures anteriorly, the punctures becoming progressively large toward the posterior, merging with reticulate on the dorsum of the propodeum and broadly reticulate on the posterior face of propodeum; dorsum clothed with scattered, pale, recumbent, and scattered, dark, long, erect hairs; lateral margins of dorsum of mesothoracic area and metathoracic area, each with a conspicuous tooth, thus two such teeth on each lateral margin between the anterior and propodeal spiracles; lateral margins of dorsum and posterior face of propodeum conspicuously toothed.

Abdomen black, maculated with pale pubescence as described above, the median, longitudinal stripe composed of a posterior marginal spot on the first tergum, a complete narrow stripe on the second, and longitudinal spots on terga three to five; first tergum with small, scattered punctures bearing long, erect, pale hairs; second tergum densely, finely punctate with interspersed, moderate punctures, and the antero-lateral areas very slightly elevated and with inconspicuous, short, sparse, parallel carinae; due to the slight elevation of the antero-lateral areas the anterior half of the median, longitudinal and the postmedian, transverse pubescent stripes appear to be depressed; second tergum clothed with sparse, recumbent, black pubescence and scattered, erect, dark hairs; terga three to five finely, densely punctate, clothed with recumbent and erect, blackish hairs, except for the pale, median spots and lateral margins; anterior half to two-thirds of last tergum with small, close punctures and sparse, fuscous to pale hairs, median, longitudinal carina of first sternum moderate, sparsely, pale pubescent; second tergum with moderate to large, separated punctures interspersed at the sides with fine punctures, clothed with pale hairs; sterna three to five with small, close punctures medially, becoming dense at the sides, all clothed with sparse pale hairs; last sternum with small, close punctures and sparse, pale hairs.

Legs very dark ferruginous to black, clothed with pale hairs; calcaria pale.

*Holotype*.—Female, Brasso, Trinidad, B.W.I.,

January 17, 1941 (E. McC. Callan), in collection of University of Minnesota.

*Paratypes*.—Female (1839), Mt. St. Benedict, North Ranges, Trinidad, B. W. I., April 24, 1933 (D. Vesey-Fitzgerald); female, St. Augustine, Trinidad, B. W. I., December 21, 1943 (E. McC. Callan); female (414), Trinidad, May (D. Vesey-Fitzgerald); female (1216), Arabopo, Mt. Roraimo, 4,000 ft., Venezuela, November 18, 1932 (D. Vesey-Fitzgerald); female, Los Canales, Naiguata, Venezuela, July 23, 1939, 720 meters (G. Vivas-Berthier), female, Caracas, Venezuela, July, 1891 (Meinert 1.); female, Caracas, October, 1891 (Meinert 1.); female, Carapito, Venezuela, March 26, 1942; female (9148), Venezuela; female (55.89), Venezuela; female, (AYN) Venezuela; female, Macuto, Venezuela, September, 1925 (G. N. Wolcott). The specimen above numbered "1216" from Mt. Roraimo bears a label "N. Brazil 1216," but the list of numbers and corresponding localities sent me by Mr. Vesey-Fitzgerald cites the locality data as given above for 1216.

All of the Venezuela paratypes have the thorax, mandibles and legs more ferruginous than the Trinidad specimens and may warrant at a later time separating them as a subspecies of the Trinidad form.

While no specimens of this species are known from British Guiana, the fact that it occurs both in Trinidad, B. W. I., and in Venezuela indicates the possibility of it occurring in British Guiana and therefore it is included here.

Similar to *investigatrix* in many respects, but the latter has the median, longitudinal, pale pubescent stripe of the abdominal terga distinctly interrupted on the anterior half of the second tergum.

Genus LOPHOMUTILLA, new genus

*Genotype*.—*Mutilla denticulata* Smith.

*Generic Characters*.—Female; proboscidal fossa moderate in size, but not extending to base of mandibles; genal carina not extending on to vertex, extending anteriorly to near proboscidal fossa, then parallel to margin of latter to near insertion of mandible, then laterad paralleling margin of mandibular fossa; genal carina connected to posterior margin of proboscidal fossa by a transverse carina; mandibles tridentate distally, the distal and inner tooth large, the intermediate tooth small; inner margin of mandible with a distinct tooth intermediate between insertion of mandible and the inner tooth of the distal three; anterior margin of clypeus with a distinct tooth in front of each antennal tubercle; antennal tubercles separated by a distance approximately equal to the diameter of one of

them; first segment of flagellum as long or slightly longer than the length of segments two and three combined; antennal scrobes strongly carinate above; head only slightly broader than the thorax; eyes hemispherical, glabrous.

Thorax subpyriform, slightly constricted at the prominent, propodeal spiracles; humeral angles with a transverse carina approximately equal in length to the first segment of flagellum; lateral margins of dorsum and posterior face of propodeum serrate or dentate; lamellar process between posterior coxae short and acute at the tip.

First abdominal segment slightly but distinctly nodose, not completely sessile with the second segment; antero-lateral areas of second tergum slightly to strongly elevated and with moderate to exceedingly strong, short, interrupted, longitudinal carinae; last tergum without a definite pygidial area, the posterior third to half of the tergum glabrous, impunctate.

Calcaria pale.

Male unknown.

*Distribution*.—South America.

The genus includes in addition to the genotype: *tuberculata* (Fabricius), *nigripes* (du Buysson), *prionophora* (Burmeister), *staphyloma* (Gerstaecker), and *triguttata*, n. sp. Some of the species (*denticulata*, *tuberculata*, *prionophora* and *nigripes*) have the antero-lateral areas of the second abdominal tergum strongly elevated and conspicuously crested; others (*staphyloma* and *chrysomalla*) have these areas only slightly, inconspicuously elevated, but with short, parallel, interrupted carinae.

#### KEY TO THE SPECIES

1. Antero-lateral areas of second abdominal tergum strongly elevated and conspicuously crested with interrupted, parallel carinae ..... 2
- Antero-lateral areas of second abdominal tergum only slightly and inconspicuously elevated, and with short, parallel, interrupted carinae ..... 7
2. Legs yellow-ferruginous; head yellow-ferruginous, maculated or not with darker areas; thorax yellow-ferruginous, maculated dorsally with darker areas; abdomen yellow-ferruginous, with at least the antero-lateral crests of the second tergum dark ferruginous to black ..... 3
- Legs entirely very dark ferruginous or black ..... 4
3. Head unicolorous, pale rufo-testaceous; crested areas of second abdominal tergum narrowly marked with ferruginous to black (Para, Brazil)

*denticulata denticulata* (Smith)



- Head pale rufo-testaceous, marked with ferruginous to black on the front and genae; each crested area of second abdominal tergum in a subtriangular, deep black spot (British and Dutch Guiana) ... *denticulata guianensis*, n. subsp.
4. Second abdominal tergum black, maculated with only a pair of postmedian, ferruginous spots, the latter sometimes confluent medially ..... 5
- Second abdominal tergum black, maculated with three ferruginous spots, an anterior, median one between the antero-lateral crests, and two posterior ones, laterad and posterior to the antero-lateral crests ..... 6
5. Postmedian, ferruginous spots of second abdominal tergum confluent medially, thus forming a narrow, transverse, postmedian band; head and thorax mostly dark ferruginous (British Guiana)  
*tuberculata* (Fabricius)
- Postmedian, ferruginous spots of second abdominal tergum separated by about half their diameter; head and thorax black (Venezuela) ... *nigripes* (du Buysson)
6. Dorsum and posterior face of propodeum clothed throughout with thick, pale pubescence; ferruginous spots of second tergum subequal in size, very large (Novo Friburgo, Brazil)  
*prionophora* (Burmeister)
- Dorsum and posterior face of propodeum mostly black pubescent, but with a long, narrow, cuneiform spot or line of dense, pale pubescence; anterior, median, ferruginous spot of second tergum distinctly smaller than the posterior ones (British Guiana) ... *triguttata*, n. sp.
7. Thorax entirely ferruginous, except the humeral angles tinged with black; pale, postmedian, integumental spots of second tergum confluent medially forming a transverse band, or the posterior two-fifths of the tergum entirely ferruginous (Brazil meridionale)  
*staphyloma* (Gerstaecker)
- Pronotum almost entirely deep black; remainder of thorax ferruginous; integumental, postmedian spots of second tergum separated medially (Brazil)  
*chrysomala* (Gerstaecker)
- LOPHOMUTILLA DENTICULATA DENTICULATA (Smith), (new combination)
1855. *Mutilla denticulata* Smith, Cat. Hymen. Brit. Mus., vol. 3, p. 48, female.
- Redescription of Smith's type:  
*Female*.—Pale rufo-testaceous, the thorax and second abdominal tergum marked with black; mandibles broad at the tip, with two teeth within; antero-lateral areas of second tergum greatly elevated and crested with short, high, parallel, thin, dentiform carinae; pygidial area not margined at the sides, entirely glabrous. Length, 8 mm.
- Head entirely rufo-testaceous, clothed with sparse, erect and recumbent, pale golden pubescence; mandibles rufo-testaceous, edentate at the tip, with a small tooth within near the tip, and with a second, larger, obtuse tooth posterior to the first; anterior margin of clypeus with a sharp, distinct tooth each side, the distance between the teeth equal to the length of the pedicel and the first and second segments of flagellum united; clypeus slightly elevated posteriorly at the middle, between the antennal tubercles, the clypeal fringe thin and pale; antennal tubercles distinctly separated; antennae rufo-testaceous, somewhat fuscous above; scape with small, close punctures and sparse, pale pubescence; first segment of flagellum equal in length to the second and third united; antennal scrobes distinctly carinate above; front, vertex and genae with small, dense, somewhat confluent punctures; genae with a high, sharp carina at the posterior margin, the carina not elevated anteriorly into a tooth or extended posteriorly on to the vertex; postero-lateral angles rounded; head fairly well developed behind the eyes, the distance between the posterior margin of the eyes and the postero-lateral angles slightly but distinctly less than the greatest diameter of the eyes; relative widths of head and thorax, 4.0 - 3.3.
- Thorax rufo-testaceous, the pronotum, a spot on the posterior part of the mesonotum extending anteriorly along the sides and posteriorly along the midline of the propodeum, black, the areas adjacent to the black spots more or less ferruginous; dorsum of thorax and propodeum with moderate, dense, contiguous punctures, clothed with sparse, erect, blackish pubescence, except the anterior and lateral margins of the dorsum, and the propodeum throughout, with sparse, long, erect, pale hairs; humeral angles distinctly angulate; lateral margins of mesonotum with two teeth between the anterior and propodeal spiracles, the anterior small and blunt, the posterior larger and acute; anterior margin of propodeal spiracles elevated into a prominent rounded tubercle; thorax narrowed behind the middle, slightly constricted at the propodeal spiracles; scutellar scale entirely absent; propodeum with a median, longitudinal carina from base to apex; lateral margins of propodeum prominently spinose; lateral aspect of pronotum not defined anteriorly by a carina, with moderate, dense, contiguous punctures and sparse, pale pubescence; mesopleura, metapleura and sides of propodeum glabrous, micropunctate, clothed with sparse, inconspicuous, pale pubescence, the

mesopleura defined posteriorly by a ventro-dorsal carina.

Abdomen rufo-testaceous, except the elevated antero-lateral areas of second tergum, apical margin of second tergum at the sides, and a small, median spot near the lateral margins, black; first tergum with small punctures, sparse anteriorly, dense towards the posterior margin, clothed with sparse, long, erect, pale hairs, and sparse, appressed, very pale golden pubescence; antero-lateral areas of second tergum greatly elevated and crested with short, high, parallel, thin, dentiform carinae; second tergum with small, dense, confluent punctures throughout, clothed with sparse, erect and recumbent, pale golden pubescence, except the black areas with blackish pubescence; terga three to five with fine, shallow, dense punctures, clothed with sparse, erect and appressed, pale golden pubescence; anterior and lateral margins of last tergum with sparse, erect, pale golden pubescence; pygidial area not margined laterally, entirely glabrous; first sternum with a median, longitudinal, sharp carina on the anterior two-thirds, glabrous, with sparse, fine, pale pubescence; second sternum with moderate, distinct, close punctures, with sparse, erect, pale pubescence, and a thin, posterior marginal fringe of pale hairs; sterna three to five finely, densely punctate at the posterior margin, and each with a thin, posterior marginal fringe of pale hairs; last sternum with fine, close punctures and sparse, erect, pale hairs.

Legs rufo-testaceous, sparsely clothed with pale hairs; calcaria pale; external, distal tibial spine at the apex of a slender process.

*Type*.—Para, Brazil, in British Museum (Natural History), London.

*LOPHOMUTILLA DENTICULATA GUIANENSIS*,  
n. subsp.

*Female*.—Holotype. Differs from the type subspecies as follows: head not unicolorous, the front with a pair of moderately large, ferruginous spots, and the genae marked with ferruginous to black anteriorly adjacent to the mandibles, the dark color continuing along the genal carina and curving inward at the posterior end of the latter to a ferruginous spot behind the eye; crested areas of second abdominal segment broadly black anteriorly, attenuated posteriorly, thus the black area subtriangular. Length, 7 mm.

*Holotype*.—Female, Courantyne river, Mora Forest, July 9, 1936 (N. A. Weber) (550), in collection of University of Minnesota.

*Paratypes*.—Female, Rio Essequibo (Source), British Guiana (J. Ogilvie); female, Pakaraima Mts., British Guiana (Meyers) (3448).

*LOPHOMUTILLA TUBERCULATA* (Fabricius),  
(new combination)

1805. *Mutilla tuberculata* Fabricius, Syst. Piez., p. 438, female.

*Type*.—Female, Essequibo (Smidt), Dom. Sehestedt, in Zoological Museum, University of Copenhagen.

Only the unique type seen.

*LOPHOMUTILLA TRIGUTTATA*, new species

*Female*.—Holotype. Head, thorax, abdomen and legs black, the second abdominal tergum marked with three ferruginous spots, one small, anterior, median and subrectangular extending to the anterior margin between the antero-lateral crests, and two very large, postmedian ones posterior to the crests and almost confluent medially; dorsum of metathorax and propodeum with a long, narrow, median, cuneiform line of dense, pale pubescence. Length, 10 mm.

Head, antennae and mandibles black; mandibles, clypeus, scape, genae, under parts of head, and front with sparse, pale pubescence; head between and posterior to compound eyes with sparse, erect, intermixed dark and pale hairs; front, vertex and genae with dense, deep punctures, the bottoms of the punctures showing obscure ferruginous in certain lights.

Thorax entirely black, the dorsum, clothed with sparse, erect, dark hairs, except a long, median, narrow, cuneiform line of dense, pale pubescence on dorsum of metathorax and propodeum; thoracic pleura and venter clothed with sparse, recumbent, pale pubescence; dorsum of thorax and propodeum and lateral aspect of pronotum with dense, deep punctures like those of the head; posterior half of mesopleura and sides of propodeum with strong, close punctures, but not as dense and deep as those on dorsum of thorax; anterior half of mesopleura and all of metapleura micropunctate, shining; humeral angles dentate; sides of dorsum of thorax with a small, obtuse tooth half the distance between the mesothoracic and propodeal spiracles; lateral margins of dorsum of propodeum with five conspicuous teeth each side.

Abdomen entirely black, except for ferruginous spots of second tergum; first tergum clothed with sparse, pale, erect hairs and a median, posterior, marginal, subtriangular spot of thick, recumbent, pale pubescence; second tergum with sparse, erect, pale hairs, except the posterior margin black pubescent, and the black areas of tergum also with sparse, intermixed, erect, dark hairs; terga three to five with recumbent, pale pubescence obscurely interrupted medially with dark pubescence, and with scattered, erect, dark hairs intermixed throughout;



venter with sparse, pale hairs; crested, carinate, antero-lateral areas of second tergum conspicuous; posterior half of first tergum and all of second tergum with dense, deep punctures, becoming less dense and deep towards the lateral margins of the second tergum, and with very small, dense punctures at the posterior margin of the second tergum; terga three to five with very small, very close punctures throughout; anterior third to half of pygidial tergum with moderate, separated punctures; first sternum with a strong, high, median carina; second sternum with large, close, mostly distinct punctures; remaining sterna with small, close punctures.

Legs black, except the tarsi obscurely dark ferruginous, clothed with sparse, pale hairs; calcaria pale.

*Holotype*.—Female, Blairmont, British Guiana, September, 1923 (F. X. Williams), in collection of University of Minnesota.

*Paratype*.—Female, New Amsterdam, British Guiana, August, 1923 (F. X. Williams).

Related to *prionophora* (Burmeister), but the latter has the propodeum clothed throughout with dense, pale pubescence, the median, anterior, ferruginous spot of the second tergum subequal in size to the posterior pair of spots, and the latter distinctly separated. Also, *prionophora* has abdominal terga three to five clothed throughout with thick, pale pubescence.

#### Genus ANCIPITOTILLA, new genus

*Genotype*.—*Ancipitotilla anceps*, new species.

*Generic Characters*.—Male; proboscoid fossa moderate in size, but not extending to base of mandibles; genal carina absent; mandibles tridentate distally, the distal and inner tooth large, the intermediate tooth small; inner margin of mandible with a small, distinct tooth intermediate between insertion of mandible and inner tooth of the distal three; anterior margin of clypeus with a small, but distinct tubercle in front of each antennal tubercle; antennal tubercles widely separated, the distance between them approximately equal to the distance between an antennal tubercle and the inner margin of the compound eye; scape with a single sharp carina beneath; first segment of flagellum slightly shorter to subequal to the second; front with a median, longitudinal impressed line extending from the anterior ocellus to space between antennal tubercles; antennal scrobes not carinate above, but with a small, median tubercle above; humeral angles of pronotum rounded; tegulae glabrous, impunctate; scutellum slightly evenly convex; dorsum and posterior face of propodeum rounded into one another, without an enclosed space, reticulate throughout; mesosternal lam-

ellate process erect in front of posterior coxae, but not extended caudad between them, angulate at the tip; first abdominal segment slightly nodose, not completely sessile with the second; second tergum with felt lines; second sternum without felt lines; calcaria pale; marginal cell of front wings not truncate distally; third submarginal cell present but less distinct than the second.

The species included here may very probably be the male sex of the females included in the preceding genus *Lophomutilla*. Both genera have the proboscoid fossa reduced, not reaching the insertion of the mandibles, the latter are exactly alike in both, the anterior margin of the clypeus is tuberculate or dentate in front of each antennal tubercle in both, and the antennal tubercles are considerably separated in both.

All the evidence indicating that these males are congeneric with the females of *Lophomutilla* is morphological however, and they are otherwise so different in appearance that it appears best to treat the males as a separate taxonomic unit until more positive biological evidence of their identity is available. Two additional species to the genotype will be described at a later date.

#### ANCIPITOTILLA ANCEPS, new species

*Male*.—*Holotype*. Body and legs entirely piceous (black with a distinct reddish tinge), except mandibles, antennal tubercles and integument beneath felt lines of second tergum, yellowish testaceous; body and legs clothed throughout with sparse, pale, glittering, mostly erect hairs and the posterior margin of the second, third, fourth and fifth abdominal terga with a sparse fringe of pale, glittering, coarser hairs; front, vertex and genae glabrous, with very small punctures well separated on the front and vertex, close on the genae; pronotum and mesonotum with small, separated punctures; scutellum with small, close, more or less contiguous punctures; dorsum and posterior face of propodeum reticulate; mesopleura with small, separated, weak punctures interspersed with micropunctures; metapleura glabrous, impunctate; sides of propodeum with small, weak punctures; first tergum with small, sparse punctures; anterior three-fourths of second tergum with small sparse, well separated punctures, the posterior fourth with small, close punctures; terga three to six with small, close punctures; last tergum with small separated punctures; median, longitudinal carina of first sternum low and weakly developed; second sternum with moderately small, separated punctures, except at the lateral margins with

small close punctures; last sternum with small, separated punctures. Length, 5 mm.

*Holotype*.—Male, Blairmont, British Guiana, September, 1923 (F. X. Williams), in collection of University of Minnesota.

This is the only described species in this genus and probably is the male sex of some species of *Lophomutilla* from British Guiana. The two species of that genus recorded from British Guiana are *denticulata* (subsp. *guianensis*) and *triguttata*.

Two other undescribed species of this genus are known to me. These differ from *anceps* in the puncturation of the integument and color of pubescence.

#### Genus LOPHOSTIGMA, new genus

*Genotype*.—*Mutilla iracunda* Cresson.

*Generic Characters*.—Female; proboscidal fossa moderate in size, but not extending to base of mandibles; genal earina not extending on to vertex, extending anteriorly to near proboscidal fossa, then parallel to latter to near insertion of mandible, then laterad paralleling margin of mandibular fossa; genal carina connected to posterior margin of proboscidal fossa by a transverse earina; mandibles edentate at the tip, somewhat broadened at the middle and weakly angulate on the inner margin near the middle, but inner margin not dentate; anterior margin of elypeus very strongly dentate in front of insertion of antennae; first segment of flagellum as long or slightly longer than the length of segments two and three combined; antennal scrobes strongly carinate above; head only slightly broader than the thorax; eyes hemispherical, glabrous.

Thorax subpyriform, slightly constricted at the prominent, propodeal spiracles; humeral angles with a transverse earina approximately equal in length to the first segment of flagellum; lateral margins of dorsum and posterior face of propodeum serrate or dentate; lamellar process between posterior coxae short and acute at the tip.

First abdominal segment nodose, disciform, with a narrow, dorsal face and a large, subcircular anterior face; margin between anterior and dorsal faces dentate or serrate; antero-lateral areas of second tergum slightly to strongly elevated; if strongly elevated, the elevation crested with close, parallel, high, longitudinal carinae; if only slightly elevated, at least with short, parallel, interrupted, longitudinal carinae; last tergum without a definite pygidial area, the posterior third to half of tergum glabrous, impunctate.

Calcaria pale.

Male unknown.

*Distribution*.—Central and South America.

The genus includes in addition to the genotype: *cayennensis* (André), *acanthophora* (Dalle Torre), *simoni* (du Buysson), *subgracilis* (Cameron), *lebasi* (Mickel), *cincta* (du Buysson), *caenodonta* (Cameron) and *alopha*, n. sp. Some of the species (*iracunda*, *cayennensis*, *acanthophora*, *caenodonta* and *simoni*) have the antero-lateral areas of the second tergum strongly elevated and conspicuously crested; others (*subgracilis*, *alopha*, *lebasi* and *cincta*) have these areas only slightly elevated, but with short, parallel, interrupted earinae.

#### KEY TO THE FEMALES

1. Antero-lateral areas of second abdominal tergum strongly elevated and conspicuously crested with interrupted, parallel carinae ..... 2
 

Antero-lateral areas of second abdominal tergum only slightly and inconspicuously elevated, and with short, parallel, interrupted carinae ..... 6
2. Second abdominal tergum with a median, anterior spot and either a pair of postmedian spots or a transverse postmedian band of ferruginous or yellowish integumental color ..... 3
 

Second abdominal tergum without a median, anterior integumental spot, with only a postmedian pair of ferruginous or yellowish integumental spots ..... 4
3. Thorax black; anterior, median, integumental spot of second abdominal tergum large, almost as large as either one of the postmedian spots (Santarem, Brazil) ..... *iracunda* (Cresson)
 

Thorax ferruginous; anterior, median, integumental spot of second abdominal tergum small, elongate; second tergum with a transverse, postmedian, integumental yellow band (Cayenne) ..... *cayennensis* (André)
4. Thorax without pale pubescent markings; sides of propodeum glabrous, impunctate, at the most micropunctate ..... 5
 

Dorsum and posterior face of propodeum with a pair of broad, lateral stripes of appressed, pale pubescence; sides of propodeum with distinct, deep punctures (Venezuela). .... *simoni* (du Buysson)
5. Head and thorax black; length 10 mm. (Para, Brazil) ..... *acanthophora* (Dalle Torre)
 

Head and thorax ferruginous; length 6 mm. (British Guiana) ..... *caenodonta* (Cameron)
6. Sides of propodeum with strong, distinct, deep punctures ..... 7
 

Sides of propodeum glabrous, impunctate, except for a few, scattered punctures



- ✓ tures near the posterior margins (Panama) ..... *subgracillis* (Cameron)
7. Thorax entirely bright ferruginous, without darker markings; lateral margins of dorsum of thorax and dorsum and posterior face of propodeum without pale pubescent stripes (British Guiana) *alopha*, n. sp.
- Thorax maculated with dark ferruginous to black; lateral margins of dorsum of thorax and dorsum and posterior face of propodeum with pale pubescent stripes ..... 8
8. Vertex with a large, yellow integumental spot (Colombia and Panama) *lebasii* (Mickel)
- ✓ Vertex entirely ferruginous, not maculated with yellow (Venezuela) *cincta* (du Buysson)

LOPHOSTIGMA CAENODONTA (Cameron),  
(new combination)

1912. *Ephuta? caenodonta* Cameron, Timehri: Journ. Roy. Agri. Com. Soc. Brit. Guiana, (3), vol. 2, p. 415, female.

Redescription of type:

*Female*.—Head and thorax ferruginous, the abdomen black, except the second tergum with a pair of narrowly transverse, preapical, pale yellow, integumental spots; mandibles slender, not toothed within near the tip; parallel carinae of antero-lateral areas of second tergum high and conspicuous; sides of propodeum glabrous; pygidium not margined laterally, entirely glabrous. Length, 6 mm.

Head ferruginous, the genae towards the insertion of the mandibles, and the front anteriorly at the sides, somewhat blackish, the front and vertex medially with sparse, erect, blackish pubescence, the vertex laterally and the genae with sparse, pale, glittering pubescence; mandibles very dark ferruginous, blackish, slender, edentate at the tip and not toothed within near the tip; anterior margin of clypeus bituberculate, the tubercles separated by about the distance between the antennal tubercles; clypeal fringe thin, pale fuscous; antennal tubercles glabrous, distinctly separated; antennae very dark ferruginous, blackish, somewhat paler beneath, scape with small, indistinct punctures and sparse, fine, pale pubescence, first segment of flagellum equal in length to the second and third segments united; antennal scrobes distinctly carinate above; front, vertex and genae with moderate, dense, contiguous and slightly confluent punctures throughout; posterior margin of genae sharply, distinctly carinate, not elevated into a tooth anteriorly, nor extending on to the vertex posteriorly; postero-lateral an-

gles rounded; head weakly developed behind the eyes, the distance between the posterior margin of the eyes and the postero-lateral angles equal to half the greatest diameter of the eyes; relative widths of head and thorax, 3.4 - 2.6.

Thorax entirely ferruginous; dorsum of thorax, and propodeum with moderate, dense, contiguous and somewhat confluent punctures, clothed with sparse, inconspicuous dusky pubescence, and scattered, long, erect, pale hairs; thorax widest anteriorly, gradually narrowed towards the rear, slightly constricted at the propodeal spiracles; humeral angles distinctly angulate; lateral margins of mesonotum with a pair of small, blunt teeth between the anterior and propodeal spiracles; scutellar scale entirely absent; anterior margins of propodeal spiracles elevated to form a transverse tubercle; lateral margins of propodeum prominently spinose; sides of pronotum defined anteriorly by a carina, with moderate, close punctures, and sparse, inconspicuous, pale pubescence; anterior half of mesopleura glabrous, micropunctate, the posterior half with moderate, close punctures, clothed with sparse, inconspicuous, pale pubescence; metapleura and sides of propodeum glabrous, micropunctate and with sparse, inconspicuous, pale pubescence.

Abdomen black, except the second tergum with a pair of narrowly transverse, preapical, pale yellow, integumental spots; first tergum with small, dense punctures, sparse, erect and appressed, pale, glittering pubescence, the posterior margin pale pubescent, the narrow dorsal face only slightly, angulately separated from the anterior face; second tergum with moderate, dense, contiguous and somewhat confluent punctures throughout, the antero-lateral areas strongly elevated and crested with short, parallel, interrupted, dentiform carinae, clothed with sparse, very pale golden pubescence at the sides and posterior third, the elevated areas with dusky pubescence, elsewhere with very pale golden, inconspicuous pubescence, the posterior marginal fringe black; terga three to five with fine, close punctures and sparse, blackish pubescence, except laterally pale pubescent; anterior and lateral margins of last tergum with sparse, blackish pubescence; pygidial area not margined at the sides, entirely glabrous; first sternum pale ferruginous, with a very high, thin, sharp carina its entire length, glabrous, clothed with sparse, short, inconspicuous, pale pubescence; second sternum with moderate, distinct, close punctures throughout, with sparse, erect, pale fuscous pubescence, and a very thin posterior marginal fringe of pale fuscous hairs; sterna three to five towards the posterior

margin, and last sternum throughout, with fine close punctures, three to five each with a very thin, posterior marginal fringe of pale fuscous hairs, the last with sparse, erect, pale fuscous hairs.

Legs very dark ferruginous, sparsely clothed with pale pubescence; calcaria pale; external, apical, tibial spine at the apex of a slender prominence.

*Type*.—Female, British Guiana, in British Museum (Natural History), London.

Known only from the unique type.

#### LOPHOSTIGMA ALOPHA, new species

*Female*.—Holotype. Head, abdomen and legs dark ferruginous to black, thorax and first abdominal segment bright ferruginous; second abdominal tergum with a narrow, longitudinal, pale pubescent line on the anterior third, and a pair of large, transversely subovate, yellow, integumental, postmedian spots, separated medially. Length, 7 mm.

Head dark ferruginous, except antennal tubercles, antennae, clypeus and mandibles, bright ferruginous, almost unicolorous with the thorax; head clothed with sparse, recumbent and erect, pale hairs, except the erect hairs on the front dark; front, vertex and genae with moderate, dense, deep punctures, the bottoms of the punctures showing ferruginous in certain lights.

Thorax entirely bright ferruginous; dorsum of thorax clothed with sparse, recumbent and erect, dark hairs, dorsum of propodeum, and lateral margins of posterior face of propodeum, with very inconspicuous, sparse, appressed, pale pubescence; dorsum and posterior face of propodeum also with sparse, long, erect, dark hairs; lateral aspect of pronotum, mesopleura, metapleura, except ventral third, and sides of propodeum with moderate, distinct punctures, clothed with sparse, inconspicuous, appressed, pale pubescence; lateral margins of thorax with two teeth between the anterior and propodeal spiracles; lateral margins of dorsum and posterior face of propodeum each with four longer and stronger teeth.

Abdomen dark ferruginous, except the first abdominal segment bright ferruginous like the thorax; anterior face of first tergum shining, micropunctate, except for a very few, scattered, moderate punctures, clothed with sparse, pale pubescence; dorsal face of first tergum micropunctate and with dense, appressed, pale pubescence; margin between anterior and dorsal faces of first tergum denticulate and with a transverse row of very long, erect, dark hairs; antero-lateral areas of second tergum only slightly, inconspicuously elevated, but with short,

parallel, interrupted carinae; second tergum with moderate, dense, deep punctures, the bottom of the punctures on the dark areas showing ferruginous in certain lights; second tergum maculated as described above, the anterior two-thirds with sparse, recumbent and erect, dark hairs, the posterior third with sparse, erect, dark hairs and sparse, recumbent, pale hairs; posterior margin of second tergum with a median, more or less indefinite, pale pubescent spot, the remainder of the margin dark, but not black, pubescent; lateral margins of second tergum pale pubescent; terga three to five and anterior third of last tergum finely punctate, the punctures dense on the third tergum and becoming progressively less dense posteriorly; these same terga with sparse, appressed, pale pubescence, and scattered, erect, dark hairs; median carina of first sternum elevated anteriorly; second sternum with moderate, distinct, close punctures and sparse, pale pubescence; sterna three to five finely punctate and sparsely pale pubescent.

Legs dark ferruginous, clothed with sparse, pale hairs; calcaria pale.

*Holotype*.—Female, Blairmont, British Guiana, September, 1923 (F. X. Williams), in collection of University of Minnesota.

*Paratype*.—Female, Blairmont, British Guiana, August, 1923 (F. X. Williams).

Related to *subgracilis*, *cincta* and *lebasi* from which it can be readily distinguished by the characters given in the key.

#### Genus MAMMOMUTILLA, new genus

*Genotype*.—*Mammomutilla pectorosa*, n. sp.

*Generic Characters*.—Male; proboscidal fossa large, extending laterad to the insertion of the mandibles; genal carina absent; mandibles moderately slender, suddenly narrowed near the tip, the distal sixth slender and acute at the tip, the angle formed on the inner margin by the sudden narrowing, rounded; antennal tubercles not separated, almost contiguous; scape with a single sharp carina beneath; first segment of flagellum approximately subequal in length to the second; front with a median, impressed, longitudinal line extending from the anterior margin between the antennal tubercles posteriorly about three-fourths the distance to the anterior ocellus; antennal scrobes not carinate above, but with a small, median tubercle above; lateral areas of pronotum with an anterior, strong, transverse carina terminating at the humeral angles in a small, but distinct tooth; scutellum slightly, evenly, convex; dorsum of propodeum rounded into the posterior face, both reticulate throughout; mesosternum conspicuously



convex each side of midline and with a distinct arcuate carina in front of each middle coxae; mesosternum declivous between the carina and the coxal fossa; mesosternal lamellate process short and erect in front of posterior coxae, but not extending caudad between them, angulate at the tip; first abdominal segment slightly nodose; second tergum with felt lines; second sternum without felt lines; ealcaria pale; marginal cell subacute at the tip, not truncate; third submarginal cell absent.

Female unknown.

#### MAMMOMUTILLA PECTOROSA, new species

*Male*.—Holotype. Piceous to black, the mandibles, antennal tubercles and tegulae testaceous, the legs and antennae slightly lighter in color than the body; body and legs clothed throughout with sparse, pale, glittering hairs, the fringes of the abdominal terga not coarser than other body hairs, except the last two terga with largely fuscous hairs; front and vertex with small, distinct, separated punctures, those on the vertex slightly larger than those on the front; genae with small, close, more or less contiguous punctures; pronotum and mesonotum with moderate, distinct punctures; scutellum with moderate, close punctures; dorsum and posterior face of propodeum broadly reticulate; mesopleura with moderately large, close punctures dorsally and ventrally, with moderate, shallow punctures interspersed, and micropunctate elsewhere; mesosternum with a deep, broad median sulcus, rugoso-punctate anterior to the arcuate carina and becoming much less coarsely sculptured anteriorly; metapleura mostly glabrous, impunctate; sides of propodeum with large, close, shallow punctures; tegulae glabrous, impunctate; first tergum glabrous, with scattered, very small punctures; second tergum with moderate, distinct, close to contiguous punctures on the anterior three-fourths, the posterior fourth with the punctures becoming small and very close at the posterior margin; terga three to seven with very small, distinct punctures; first sternum with a distinct, median, longitudinal carina, strongly elevated anteriorly into a conspicuous tooth; second sternum with moderate, distinct, well separated punctures; sterna three to seven with very small, distinct punctures. Length, 6 mm.

*Holotype*.—Male, Blairmont, British Guiana, August, 1923 (F. X. Williams), in collection of University of Minnesota.

Easily recognized by the form of the mandibles and the form of the mesosternum in front of the middle coxae. No satisfactory evidence is available as to the female sex of this species.

The obvious possibilities seem to be species of the preceding genus *Lophostigma*, or *Pseudomethoca diligibilis* described herein. However, this is purely conjecture and one can only await some positive information as to what the female may be.

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